8-2005

Using Projective Measures to Examine the Relationship Between Adult Attachment Status and Object Relations

Betty Marie Martin
University of Tennessee, Knoxville

To the Graduate Council:

I am submitting herewith a dissertation written by Betty Marie Martin entitled "Using Projective Measures to Examine the Relationship Between Adult Attachment Status and Object Relations." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

Leonard Handler, Major Professor

We have read this dissertation and recommend its acceptance:

Robert Wahler, Laurence James, Richard Saudargas

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

To the Graduate Council:

I am submitting herewith a dissertation written by Betty Marie Martin entitled "Using Projective Measures to Examine the Relationship Between Adult Attachment Status and Object Relations." I have examined the final paper copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

Leonard Handler, Major Professor

We have read this dissertation
recommend its acceptance:

Acceptance for the Council:

Vice Chancellor and Dean of
Graduate Studies

Using Projective Measures to Examine the Relationship Between Adult Attachment Status and Object Relations

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Betty Marie Martin
August 2005

Dedication

This dissertation is dedicated to Drs. Chuck Jones, Jack Barlow, Joyce Cartor, and Mary Margaret Kelly. You have all become significant parts of my internal world through acceptance, support, opening doors, showing me exciting paths, and guiding me to new understandings. Thank you.

Acknowledgments

I would like to thank Drs. Leonard Handler, Robert Wahler, Richard Saudargas, and Laurence James for serving on my doctoral committee. I appreciate Dr. Wahler's introduction to attachment theory, academic support, and continuous efforts in helping me become familiar with measures of attachment. I would like to thank Dr. Handler for his mentorship, guidance in research, and introducing me to Carol George and Malcolm West. I also thank Carol George and Malcolm West for their excellent training in the use of the Adult Attachment Projective. Further acknowledgment goes to Paul Hoffman, Eric Peters, Ian Haag, Chad Sims, Noah Roost, and Yakini Stephens. This dissertation would not have been possible without their research contributions.

Abstract

The purpose of this study was to document an empirical link between attachment theory and object relations by using projective measures, while further defining John Bowlby's concept of the internal working model. The internal working model is a set of unconscious cognitive and emotional guidelines for how an individual understands interpersonal interactions, and influences behavioral and emotional responses (Bowlby, 1973, 1988). The internal working model, as described in Bowlby's attachment theory, bears striking resemblance to object relations theories of internalized unconscious representations. For example, Donald Winnicott stressed the importance of early interactions with the primary caregiver as shaping the child's internal mental and emotional world through processes of internalizing representations of the parental figure as a psychological object (Winnicott, 1931). 100 Undergraduates were administered the Adult Attachment Projective (George, West, and Pettem, 1999) and Thematic Apperception Test, measured by Drew Westen's Social Cognition and Object Relations Scale (Westen, 1995). Results show that individuals classified as secure have significantly higher average scores on the object relations dimensions of Complexity of Representation of People, Affective Quality of Experiences, Emotional Investment in Relationships, Understanding of Social Causality, Experience and Management of Aggressive Impulses, Self-Esteem, and Identity and Coherence of Self than insecure individuals. These findings suggest that object relations can be used to provide a more comprehensive understanding of the internal working model underlying adult attachment status.

Table of Contents

List of Tables

Table Page

I. Introduction

In recent years, developmental psychology has began to use attachment theory--specifically an individual's attachment status--to help explain personality and behavioral development, developmental psychopathology, and to derive clinical implications for therapeutic intervention. Attachment theory has its origins in evolutionary, ethological, psychoanalytic and cognitive approaches to human development (Bowlby, 1988). These approaches emphasize early caregiving experiences as forces that shape an individual's internal working model of attachment relationships (Bowlby, 1988).

According to attachment theory, the initial interactions between primary caregiver and child will influence how well attached the child is to the primary caregiver. The child will instinctually seek to engage the mother as a means to survival. As the child becomes either securely or insecurely attached to the caregiver, the child will develop internal cognitive structures based on the caregiver relationship, known as internal working models. These internal models, largely unconscious, set the structure for how the child perceives self and others in the context of interpersonal relationships and carry implications for later personality and behavioral development. This approach, heavily influenced by classical psychoanalytic and object relations theory (e.g., the internalization of interpersonal experiences), has gained prominence for stressing the importance of the primary caregiver-child bond as the foundation of personality development (Sable, 1992).

Classical psychoanalytic theory and object relations theory differ slightly from attachment theory in the drives which are said to motivate infant and child behavior.

Classical psychoanalytic theory, originally developed by Sigmund Freud, emphasizes sexual and aggressive urges as instinctually motivating infant and child behavior. Later, object relations theories developed out of Freud's original theories and emphasize human relatedness rather than sexual and aggressive drives. According to object relations theories, the child has an inherent desire to engage in relationships with objects in the world, such as humans. While object relations places less emphasis on instinctual drives, both classical psychoanalytic and object relations theories argue that the early relationship with the primary caregiver leads to mental and emotional internalizations of self and relationship-oriented representations which later influence psychological development. Bowlby originally argued that his work was rooted in classical psychoanalytic and object relational theories, but these theories suffered from lack of empirical research and scientific measures to tap unconscious processes (1969, 1988).

While attachment theory has generated a rich and rapidly growing body of findings addressing empirical understandings of infant attachments and related childhood personality styles and behaviors, there has been little work applying research methods to scientifically document the relationship among attachment theory, classical psychoanalytic theory, and object relational processes. Such research is inherently important to the field of psychology because classical psychoanalytic theory and object relations theories have yet, for the most part, to earn scientific acceptance in the field of behavioral sciences due to a lack of empirical support for the theories. Both classical psychoanalytic and object relations theories richly inform clinicians and therapists in the psychological processes which underlie personality and behavioral development, but the

validity of such theories remains in question when there is a significant lack of scientific evidence to document complex, dynamic, and often unconscious psychological phenomena.

Though attachment theory has significantly contributed to the field of psychology through expanding understandings of infant and child psychological functions, comparatively less research has been generated in the realms of adult attachment and personality functioning (Rothbard & Shaver, 1994). For example, although there has been discussion and research of adult attachment, there are few studies which link adult attachment status to daily psychological functioning (Rothbard & Shaver, 1994). In this arena, object relations research has expanded beyond attachment theory to use empirically derived measures to study object relations in the differentiation of psychopathology.

Rather than continue segregation in paradigms of thinking, this study proposes that integration of the major theories would allow for a more comprehensive understanding of human development, with implications for adult personality functioning and psychopathology. Focusing on the strengths and commonalities among the theories would generate directions for future research, increase knowledge of psychological growth processes, and influence therapeutic interventions for psychopathology. In this way, attachment theory, classical psychoanalytic theory, and object relations theory can be interpreted to inform and expand upon each other to promote increased awareness of psychological processes.

Attachment Theory

Attachment theory, as developed by John Bowlby, states that infants are born with instinctual motives to demonstrate goal-oriented behavior in a particular environment, namely to engage mother as a means to survival (Bowlby, 1969). Such behaviors are affect laden while the infant interprets and processes sensory information from his/her internal world and external environment to ensure survival (Bowlby, 1969). For example, the baby cries when hungry to alert mother so the baby can be fed (Bowlby, 1969). Bowlby theorized that such behaviors on the part of the infant then solidify the relationship with the primary caregiver to meet the physical and emotional needs of the child, protect the child from harm, and educate the child in gradual autonomy (Bowlby, 1969). He believed that the child was particularly vulnerable to the effects of either adequate or inadequate care during the first several years of the child's life (Bowlby, 1969). According to Bowlby, a primary caregiver who is attuned to the infant and meets the infant's physical and emotional needs in a timely fashion will enable the infant to cognitively develop a functioning internal working model to understand and predict attachment oriented behaviors in the self and others (Bowlby, 1988).

The internal working model is an internal, cognitive, often unconscious mental structure, which sets guidelines for how the infant understands self and others in the context of interpersonal interactions (Bowlby, 1988). The working model will then influence the infant and developing child in perceiving events, forecasting the future, and constructing plans or behaviors and largely influence emotional responses (Bowlby, 1973). This strong emotional bond between caregiver and infant will eventually enable

the infant to internalize comforting responses from the caregiver in times of distress so that the infant comes to learn emotional self-regulation skills (Bowlby, 1988). For example, because the baby experienced attuned caregiving from her mother, she can come to rely on her mother in times of need and expect to be soothed by her mother. This level of stability and predictability enables the infant to internalize a concept of her mother which is comforting, eventually leading the infant to call upon this representation in times of distress without needing the actual physical presence of her mother. She now has an internal working model of mother, which may facilitate the development of self-soothing behaviors such as thumb sucking or holding a stuffed toy to comfort herself.

A major disruption in primary caregiving, such as loss of or change in a caregiver, or the experience of a caregiver who is unpredictable, neglectful, rejecting or abusive will inhibit the development of a functioning and adaptive internal working model in the child, while facilitating the increased likelihood of developmental psychopathology (Bowlby, 1988). Bowlby emphasized the role of emotion in attachment theory as the child may become overwhelmed with anxiety or mourning in light of disrupted or poorly attuned caregiving (1988). He postulated that if a child is physiologically overstimulated due to disruptions or inadequacies in the caregiving experience, the child will attempt to adapt to and contain the overstimulation by altering the flow of sensory information, creating long lasting implications for personality development (Bowlby, 1980). Such adaptations can include ignoring or distorting cognitive and perceptual information through repression, cognitive disconnection from a situation, redirection of information, or preoccupation with personal sufferings (Bowlby, 1980). Repression would involve an

inability to recall certain thoughts and feelings from memory; cognitive disconnection is an inability to trace certain thoughts and feelings to an original situation; redirection often involves directing anger away from the person who elicited the emotion; and focusing on personal suffering is intended to direct attention away from a more difficult and painful situation (Bowlby, 1980). These distortions then impact and distort the structure of the internal working model of relationships and create child attachment relationships which maybe insecure, anxious, over dependent, and angry rather than secure (Bowlby, 1973).

Once the child has developed maladaptive internal working models based on the original caregiving experience, his/her ability to function in future relationships, or even act effectively in the world, is compromised. The child, for example, now has an internal working model that is not rooted in stability, predictability, or the expectation that the caregiver can soothe. Rather, the internal working model may be grounded in abuse, neglect, loss, fear, anxiety, or anger (Bowlby, 1973). The maladaptive internal working model will then influence how the child perceives self, understands others in the context of the world, and colors most interpersonal interactions (Bowlby, 1973). Pathology can then involve a compromised understanding of the self and others, leading to a host of psychological inadequacies, complications, and disorders (Bowlby, 1973). Psychological disturbance is related to disruption of main attachment relationships or an inability to form original attachment relations, while treatment interventions address the impact of attachment, current and/or past separation and loss experiences, with the intent to modify thinking, feeling, and behavior (Bowlby, 1988). Bowlby's attachment theory has significantly impacted the field of developmental psychology through the provision of a

framework of understanding and researching infant attachment, consequent childhood personality styles and behaviors, and continued emphasis on early childhood experiences as fundamental to personality development. Meanwhile, Bowlby stressed that the infant from birth has an array of potentially available developmental pathways or courses of human development (Bowlby, 1988). Progression along a particular pathway is determined by environmental factors and the way in which child contends with those factors (Bowlby, 1988). A child with healthy parental relations will most likely develop healthy internal working models and consequently have improved psychological health than a child with poor parental relations and maladaptive internal working models (Bowlby, 1988). Even so, there exist continuing potentials for changes in growth and development in either positive or negative directions for most any individual throughout the lifecycle (Bowlby, 1988).

Classical Psychoanalytic Theory

Sigmund Freud has informed the field of psychology through his various writings between 1888-1937. He was the first psychologist who introduced the mental and emotional world of the infant as well as the importance of the early relationship between infant and primary caregiver. Freud also significantly contributed to the field of psychology the role of trauma in personality development and the implications of unconscious processes. Further, he provided major insights into the development and treatment of psychopathology and laid the groundwork for later theories in object relations.

Freud originally argued that an infant was born with a certain amount of psychological and physical energy, which would serve to motivate the child to meet certain needs such as hunger, breathing, and sexuality (Freud, 1895). For the most part, the energy would remain in a state of inertia, until such needs created a disturbance in the child, forcing the child to manifest behaviors to meet those needs (Freud, 1895). Freud believed the infant was born with a "pleasure principle," also known later as "libido or libidinal energy," a psychological drive that moves the infant towards pleasurable experiences rooted in sex and aggression, such as sucking the mother's breast while causing the infant to draw away from sensations that are not pleasurable (Freud, 1911; Freud, 1924). Sucking the mother's breast is both sexual and aggressive in nature according to Freud (1924). Because the infant's needs must be met from external sources, a "reality principle" develops which aids the infant in perceiving and modulating the external world, namely the relationship with the mother (Freud, 1911). The reality principle, later known as "ego," would also serve to keep libidinal energies at bay because the infant can only tolerate a certain level of excitement in a given period of time, and can only expend a certain amount of energy at any point in time (Freud, 1920). The ego is grounded in instincts geared towards self preservation and will serve to modulate the infant's internal world and external reality to decrease tension created by the conflict of wants, desires, and passions and not having them directly gratified (Freud, 1920).

Freud also believed the amount of tension an infant experienced would strongly augment how the libido and ego function. Should an infant experience too much tension

due to over excitation from the external world, such as the mother either over gratifying or neglecting the child's needs, the flow of energy will be altered in an attempt to compensate for the excessive level of excitement (Freud, 1920). The infant will employ defensive mechanisms, such as repression or forgetting unwanted and painful memories in an attempt to restore the balance of energies (Freud, 1920). The ego then serves to repress painful memories in an attempt to protect the baby from what Freud considered trauma (Freud, 1920). He argued that trauma was any level of excitation which caused a disturbance in the flow of energies and required the infant to employ defensive mechanisms as a means to control the flooding of over stimulation (Freud, 1920). According to Freud, trauma would then relate to later psychological problems because the repressed experiences will be re-enacted by the individual without conscious awareness and perhaps in an unrecognized form (Freud, 1920).

Freud later clarified the psychological structures which serve to manage intrapsychic tension such as the id, otherwise known as libidinal energies; the ego, the conscious and unconscious organizer of mental experiences; and the superego, which emphasizes the higher nature of man such as religion, morality, and social sense of responsibility (Freud, 1923). Freud theorized that many experiences and influences which serve to shape personality (i.e., the flow of energies managing the struggle among the id, ego, superego, and the external world) are largely unconscious and rooted in the early experiences and interactions with mother (Freud, 1923). Through processes of identification with the parental figure and then internalization of those identifications, the dynamic interplay between id, ego, and superego become solidified before the age of five

(Freud, 1924). As the child identifies or finds similarities with the parental figure, representations of those parental objects become internalized in the child's world through the structures of id, ego, and superego. The type of relationship with the parent, for example, mother, would then be continuously and unconsciously experienced in the child's internal world.

Freud emphasized the relationship with mother as the "love object," where the infant is driven to expend energies in seeking pleasurable sensations, such as feeding or being touched (Freud, 1924). In this sense, the infant comes to love the mother as she meets those needs, and will experience intense anxiety at feeling a loss of her (Freud, 1924). This fear is soothed by the physical presence of the other, and will later manifest into adult neurotic fears if comfort is not given to the child (Freud, 1924). In this way, the type of relationship with the mother will be expressed through the level of conflict among the id, ego, and superego (Freud, 1924). An adequate relationship with the mother would result in low conflict among the internal mental structures, while an inadequate relationship with the mother would result in more intrapsychic conflict (Freud, 1924). The mother relationship then becomes the prototype for all other later love relationships, as the adult tries to recapture the happiness once experienced with the mother or re-enacts the disturbed relationship with the mother (Freud, 1924). Although Freud argued that the mother's relationship with the infant is inherently sexual in fondling and feeding the infant and due to the infant's desire for sexual gratification, he believed the infant was protected from sexual abuse due to the cultural barriers of society (Freud, 1924).

A Comparison of Attachment Theory and Classical Psychoanalytic Theory

Bowlby, himself, argued that his theories were heavily influenced by the works of Freud and stated that his theory was only a variant of Freud's original hypotheses (Bowlby, 1969). Bowlby argued that although both theories share many common themes such as sensitive periods of the infant's early life, the emphasis on early relationships with primary caregiver, and the pathogenic potential of loss and trauma, he differed from Freud in a few fundamentally different ways (Bowlby, 1969). First, whereas Freud retrospectively gathered data in the traditional method of inquiry of his clients, Bowlby advanced the field of psychology by gathering data from real life situations through prospective and direct observations of children as a means to predict later psychological development (Bowlby, 1969). Bowlby felt he was much more specific regarding the definition of trauma as being separation from or loss of the primary caregiver, whereas Freud did not specifically define the nature of trauma to the infant beyond a level of excitation exceeding the infant's capacity to manage (Bowlby, 1969). Bowlby agreed with Freud that there would be structural psychological configurations, psychological origins to those configurations, and an adaptive component of the configurations to the environment (Bowlby, 1969). He mainly disagreed with Freud's understandings of psychological energy. He could not conceive of an infant having a said amount of psychological energy which would be expended in certain amounts at given periods of time (1969). Hence there is a primary and fundamental difference in what motivates infant and child behavior, internal psychological and sexual energies, or the instinctual desire to seek mother as a means of survival. Bowlby also rejected the concept that an

individual passes through stages of development, and can become fixated at or regress to a particular stage (1988). He emphasized the importance of multi-varied developmental pathways being open to a child, and that behaviors viewed as neurotic or fixated from a psychoanalytic perspective are actually normal behavior demonstrated by frightened or distressed children (Bowlby, 1988).

What may initially appear to be a small difference of opinion in what motivates behavior actually created a major break between Bowlby and other psychoanalytic thinkers (Fonagy, 1999). Fonagy noted that attachment theory was criticized by psychoanalytic thinkers for being too mechanistic, nondynamic, renouncing drives, unconscious processes, and ignoring complex internalized motivational and conflict resolution systems (Fonagy, 1999). Attachment theory also seemed to ignore the richness of human affect, as well as the infant as a pleasure-seeking creature, with a too narrow definition of physical separation creating vulnerabilities in the child (Fonagy, 1999). Bowlby was criticized for failing to consider the role of the child's ego in navigating attachment relationships and reactions to loss, ignoring negative attachments, and ignoring trauma other than physical separation (Fonagy, 1999). While Fonagy also discussed Bowlby's remarks on similarities between psychoanalytic and attachment theories, he also noted that Bowlby felt psychoanalytic theory gave too much weight to metaphysical workings of the mind, which could not be measured (Fonagy, 1999). In this sense, Bowlby argued that Freud placed too much emphasis on the role of fantasy in the child's life, rather than real life experiences such as trauma or loss (Bowlby, 1988).

Fonagy observed that both Freud and Bowlby speak to unconscious processes, namely in Freud's psychic energies playing between id, ego, and superego and Bowlby's internal working models (Fonagy, 1999). Just as the ego creates defenses, such as repression, Bowlby's internal working models will create perceptual and cognitive distortions necessary to tolerate anxiety, fear, separation, and loss (Fonagy, 1999). According to Fonagy, both Freud and Bowlby speak to biologically determined experiences such as fear, linked to the danger of losing the primary caregiver or fundamental love object (Fonagy, 1999). He also stressed the commonalities outlined earlier by Bowlby: a) recognizing the importance of attachment to the mother figure, b) the use of abandonment and isolation distress the infant, c) the idea that anxiety is rooted in fear of loss of the mother, and d) the child's relation to mother is unique and laid down unalterably at an early age while becoming the prototype for later love relations (Fonagy, 1999). Fonagy argued that main differences resided in the areas of Freud's emphasis on cultural influences, the fact that his views of infancy were for the most part abstract and not based on direct observation, his lack of differentiation between interactions involving real parents versus fantasy parents, his lack of clarity involving the development of the self, and his emphasis on repetition of childhood experiences in adulthood (1999).

Other theorists continue to note differences in the two theories. Cassidy (1998) points out that Bowlby argues instinctual drives such as sex and aggression are outside the realm of attachment theory. Sable (1992) argues that Bowlby replaced instinctual sexual and aggressive drive theory with an ethological orientation where the infant has instinctual patterns of behaviors that facilitate the forming of an affectional bond between

caregiver and infant. This bond allows a continual unfolding of personality strongly influenced by attachment experiences, leaving the individual prone to health or psychological adaptation (Sable, 1992). Meanwhile, Silverman (1991) argues that activation of the attachment system is similar to drive theory in that experiences of the infant are internalized as a psychological structure in the form of object representations which can be distorted when interacting with drive defenses (Silverman, 1991).

Although Fonagy argued that it is difficult to compare classical psychoanalytic theory to attachment theory due to Freud's diverse and wide reaching contributions to psychology, there is nevertheless room for disagreement. In line with Silverman, at the heart of these two theories are fundamentally similar processes. The intimate relationship between mother and infant is fundamental to personality development because the interactions between mother and infant lead to internalized understandings of self and others. Bowlby and Freud both argue for the development of psychological constructs such as internal working models or the level of conflict between id, ego, and superego which serve to shape future perceptions of events, interpretations of those events, and shape behavioral and emotional responses. Although they may disagree on the type of psychological drive that motivates infant behavior, the outcome is the same. The infants needs and depends on the mother and is vulnerable to severe anxiety and loss should primary caregiving relationship become disturbed either through separation, loss, or pathogenic care.

With this in mind, Bowlby does not clearly elaborate on how the internal models may shape future behaviors or acknowledge their powerful affective nature in shaping an

individual's reality. This is where classical psychoanalytic theory significantly contributes to understandings of personality development. Freud's model of conflict among the id, ego, and superego are entirely affective in nature and exert strong influences in shaping personality and behavior to the degree that an individual can compulsively repeat earlier experiences lived out with the parental figures. A parsimonious integration of these two theories would emphasize the following: 1) the strong influence of the early relationship between parent and child as fundamental to human development through, 2) parent child interactions that lead to the internalization of the relationship in various forms, 3) these internalizations can be disrupted, inhibited or distorted by trauma, and 4) create the need for defensive adaptation and later maladaptive personality and behavioral functioning. In this sense, adequate parenting would lead to healthy internalizations of cognitive internal working models and affective psychological structures such as id, ego, superego which are low in conflict, enabling the child to understand positive experiences of self and other in the world.

Meanwhile either separation from or loss of the primary caregiver; or parenting which was traumatic through emotional and/or physical abuse or neglect of the child, would result in maladaptive internalizations of the relations. The child experiencing such trauma then employs defensive processes as a means to adapt to the intolerable affective state which resulted from the failing environment. Such adaptations among the internal working models and intrapsychic structures are both cognitive and affective, leading to distorted or inaccurate understandings of self and others, maladaptive personality

functioning and behavioral functioning and the possibility of repeating the earlier lived experience.

Object Relations Theory

Object relations theory also stresses the importance of the early relationship with the mother as an imperative influence on personality development and overall psychological functioning. Object relations theories emphasize early interactions with the primary caregiver and determine the structure of the child's internal mental world through processes of internalizing representations of the parental figures as psychological objects. Many object relations theorists deviated from Freud's emphasis on instinctual drives and child sexuality in order to highlight the importance of human relatedness, the desire to relate to other human beings as the primary motivator of infant and child behavior. This paper will focus on the Independent British Object Relations work of Donald Winnicott, a pediatrician who spent over twenty-five years observing children in his practice and developed object relational theories rooted in the relationship between mother and child. An emphasis is placed on the Donald Winnicott's theories due to marked similarities to attachment theory. The paper will also provide a brief review of object relations theorists from other various backgrounds.

Winnicott argued that the infant was not capable of being an individual due to its absolute dependence upon the mother (Winnicott, 1935). The child's initial sense of love is governed by physical needs, the desire to satisfy those needs, seeking pleasure, and avoiding discomfort (Winnicott, 1935). The mother as object then, plays a pivotal role in

providing for and satisfying the infant's needs while removing discomfort (Winnicott, 1935). How the mother goes about fulfilling the needs of the infant in the first five years of life then lays the foundations for mental health or psychoneurosis because she becomes an internalized object in the child's psychological world (Winnicott, 1931). The parents' attitudes, particularly the mother's, towards the child's inherent greed and destructive tendencies will influence the baby's behaviors and expectations from the world (1941). If the infant has happy experiences in a stable, friendly atmosphere then the infant can build confidence in people in the external world and have belief in good things and object relations inside him/herself, which creates an overall sense of stability (Winnicott, 1941).

The mother then becomes an internal source of love and protection for the infant, while the infant will experience fear of losing mother due to his/her natural destructive tendencies (Winnicott, 1948). The mother becomes a presence in the child's internal world due to her ability to provide for the child and tolerate the child's aggressive attacks (Winnicott, 1948). With this in mind, the child will intrinsically be motivated to make reparations with the mother at times when aggressive tendencies are displayed (Winnicott, 1948). Another form of anxiety experienced by the child may result from being insecurely held, or a failure on the part of the mother to give continuous life support through adequate mothering (Winnicott, 1952). Should these failures occur, the infant's wishes and fears in relation to the parent may be disturbed, while the infant can also experience prolonged excitation of the physical body, resulting in the manifestation of defensive processes (Winnicott, 1931).

Winnicott clearly outlined adequate maternal care versus inadequate maternal care. He first coined the term, "primary maternal preoccupation," which describes a psychological state of heightened sensitivity of the mother to the needs of the child (Winnicott, 1960). The mother will be psychologically motivated to tend to her child's needs and provide "good enough care" of the infant through protecting the infant, attending to the infant's physiological needs, providing routine care for the infant, and closely following changes in the infant's development (Winnicott, 1960). Through this relationship, the infant will learn to depend on help from the external world; develop a sense of external reality; develop an integrated and stable personality based on interactions with the mother; and begin to have a sense of his/her own body (Winnicott, 1935). As the mother genuinely and consistently mirrors or reflects back the infant's internal states to the infant, he/she will then develop an internalized concept of self and other (Winnicott, 1971). The interactions between mother and child then lead to integration of the self, personalization, and object relating (the ability to relate to others both internally and externally) (Winnicott, 1971). Not only does the child develop a sense of him/herself as an individual, the sense of mother as unique and separate also becomes part of the child's internal understandings. This internal understanding, or internalized good object then influences the child's perception of self, other, and world.

"Inadequate mothering," or maternal care which is not attuned to the infant's needs, will prohibit the internalization of self and other (1952). The infant will experience prolonged excitation due to not having his/her needs met, and will not receive adequate mirroring from the mother, resulting in feelings of the self as unintegrated

(fragmented sense of self), disintegrated (self as falling apart), depersonalized (self is not real), develop an inadequate relationship between mind and body, or experience a shift in consciousness away from the disturbing event (1952). Such distortions prevent the adequate development of a mature ego and force the child to face unthinkable anxiety (1962). These disturbing sensations of intolerable anxiety or depression in the child, create the development of the "manic defense" as a means to ward off the negative emotions (1935). The manic defense can include denial of internal reality (a lack of inhabiting oneself), flight from external reality (daydreaming, manipulations of sexuality or sensuality), suspended animation (attempts to control the "bad" internal parental objects, which will translate into disrupted real world relationships) (1935). Winnicott argued that trauma would involve deprivation or loss of the "good enough mother" with the consequences being typically unconscious and carrying implications for later psychopathology such as schizophrenia, false self, and schizoid functioning (1962). The infant's "true self" or sense of personality may be buried beneath a "false self," otherwise known as the self that develops to compliantly react to an environment not geared to meet the infant's needs. Those infants who must adaptively develop a false self may feel inadequate or empty until the true self may later be revealed in the context of a nurturing and supportive environment (1960).

A Comparison of Attachment Theory and Winnicott's Object Relations Theory

Fonagy states that Bowlby and Winnicott coincide in emphasizing the importance of adequate caregiving to the infant as fundamental to later development of internal

structures (1999). According to Fonagy (2001), both Winnicott and Bowlby stress the importance of maternal sensitivity to the infant's behavioral cues in the earliest years, and the degree of sensitivity and responsiveness that will later impact psychological growth in the child. These processes occur according to both theories in the form of: a) the caregiver not impinging upon the child through curtailing the child's natural expressions; b) the caregiver acting as a tension regulator for the child; and c) the child developing an internal representation of the relationship with the mother, which is the prototype for future relationships and consequent relationship behaviors (Fonagy, 2001). Cassidy (1998) noted commonalities between attachment and object relations theories in they both state that a) parents are powerful influences on children, b) children develop mental models which are based on experiences with parents and those models will later influence children's expectations, feelings, and behavior with others, and c) experiences related to separation from and loss of an attachment figure play a key role in the activation of these models. Both theories emphasize the importance of mother's availability to the child as encouraging the child's exploration of the world in the form of secure base for attachment theory and internalized object for object relational theory (Cassidy, 1998). Both perspectives describe the role of mother as a source of comfort in times of trouble and describe the anxiety caused by the absence of mother while asserting the development of pathology as related to disturbances in early experiences with the caregiver (Cassidy, 1998).

As Fonagy and Cassidy have discussed, there are striking similarities between attachment theory and object relations theory, as outlined by Winnicott. Both theorists

emphasize the importance of adequate maternal care to the infant. Adequate care of the infant in the early years will then result in internalized psychological concepts such as internal working models and an internalized representation of mother. Both theories argue that there will be inherent fear in losing the attachment or love object, while prolonged excitation of the infant may carry deleterious consequences. Prolonged excitation of the infant may result from disruption in care giving through inadequate maternal care, or loss of/separation from the caregiver. These disruptions in the relationship with the primary caregiver will cause the infant to engage in adaptive defensive processes to manage the intolerable level of anxiety that results from such disruptions. For Bowlby, the infant will use processes of cognitive distortion such as repression, cognitive disconnection, redirection, or preoccupation whereas Winnicott emphasizes more affective disruptions such as feelings of unintegration, disintegration, depersonalization, as well as more manic defenses against anxiety or depression such as denial of internal reality, flight from external reality, or suspended animation. Meanwhile, Winnicott speaks specifically to the development of a compliant false self in place of the authentic true self. While both Bowlby and Winnicott speak to these adaptations as carrying implications for the development of later pathology, Winnicott appears to have been more specific in defining the compromises made to the affective experience of self. Regardless, there has been little empirical support for his theoretical framework.

A parsimonious integration of these two theories would look very similar to the comparison made between classical psychoanalytic and attachment theory. Again, the

emphasis is placed on parent child interactions, leading to the internalization of the care giving relationship. This internalization can be hindered through inadequate parenting or loss of the caregiver. In order for the infant to manage the resulting physiological state of fear or anxiety, defensive processes are employed leading to a distorted experience of self and other with complications for later pathology.

Additional Object Relations Theories

While Donald Winnicott may be considered a key contributor to the Independent British Object Relations theorists, Melanie Klein is often associated with the Classic British Object Relations theories due to her expansion on the original works of Sigmund Freud. While Bowlby's training and experience in the British Psychoanalytic Society was predominantly Kleinian, he continued to emphasize the need for scientific approaches to understanding the theoretical underpinnings of human development (Fonagy, 1999). Melanie Klein developed her theories out of her extensive work with children and adults in therapeutic settings. She postulated the infant is subject to internal persecutory anxieties as a result of guilt and fear associated with the infant's inherent greed and aggression that is directed towards the mother's breast in the first three to four months of life (Klein, 1952). The infant begins to develop an internal fantasy world of "good" and "bad" part objects based upon his or her projections of gratifying and frustrating experiences onto the breast and consequent introjections or taking in of those experiences into the internal world (Klein, 1952). In this sense, the infant's developing world of actual and whole objects in the environment (i.e., mother) is bound up with his

or her fantasies of the experiences with her breast (Klein, 1952). The process of projection then carries the perpetuation of persecutory anxiety (Klein, 1952). As the infant desires to greedily devour the mother's breast, the infant fears that he or she will be greedily devoured, hence the development of the paranoid-schizoid position (Klein, 1952). Relation to part object (breast) and splitting of idealized (good breast) and persecuted (bad breast) experiences and/or fantasies are hallmarks of this position (Klein, 1952). Psychological defenses such as splitting, omnipotence, and denial will be employed by the infant to manage anxiety until more sophisticated processes develop (Klein, 1952). Integration, rather than vacillation, of destructive and loving impulses towards the breast give rise to the "depressive position," where the infant may experience guilt, sadness, and the desire to make reparations to the injured loved object or good breast (Klein, 1952). The abilities to experience ambivalence and make reparations are more highly developed processes, which also gives the infant a more realistic understanding of the external world and others, and modulates persecutory anxiety (Klein, 1952). An inability to overcome primitive defenses against persecutory anxiety may result in rigid barriers between the conscious and unconscious, excessive repression, and disturbed psychological development (Klein, 1952).

Fonagy (1999) has noted points of convergence between Bowlby's attachment theory and Klein's Object relations theory in terms of stressing the importance of the first year of life and also noting Klein's theoretical constructs and processes appear to be operationalized by the scoring system of the Adult Attachment Interview (AAI). For example, splitting takes the form of memory discrepancies, lability of mental

representations are captured by narrative inconsistencies, the "depressive position" appears to reflect secure attachment and the ability to recognize and accept imperfections of the caregiver, and the interview is structured to capture defensive processes such as denial or idealization. Fonagy (1999) linked Klein's concept of projective identification to research on children with disorganized attachment styles, notably children with histories of parents who have unresolved trauma, maltreatment, maternal depression, and prenatal parental substance abuse. He theorized that children are forced to internalize confusing and hostile aspects of their caregivers, which they must then externalize in order to maintain some degree of coherent self (Fonagy, 1999). Meanwhile, Muir (1995) has explored the possibility that Klein's theories have significant overlap with child attachment research and has put forth the idea that the Kleinian conception of infant development prepares the way for optimal development of the attachment system. Attachment mechanisms then secure the development of early object relations (Muir, 1995)

Fonagy stated that Bowlby's main objection to Kleinian theory was the neglect of actual experience, the assumption that anxiety arises from constitutional tendencies, and attributing intentionality to the infant (1999). Attachment theory does not incorporate a death instinct and is more categorical in separating attachment styles, rather than dimensional in Klein's universal positions (Fonagy, 1999). Jude Cassidy (1988) has consistent difficulty with Klein's theories. In particular Klein's core emphasis on the child's unconscious fantasies and intrapsychic conflict to the exclusion of actual experiences, and her emphasis on early experiences with the mother being colored by

frustration, anger, and suspicion. Cassidy (1998) also argued that from Bowlby's attachment theory, infants are biologically predisposed to adapt to the environment, rather than being driven by a death instinct, sex or aggression.

Heinz Kohut offered an American version of psychodynamic theory through his development of self-psychology. Kohut theorized that the infant is motivated by a need to maintain a cohesive self, fueled by healthy narcissism or self-love (Kohut, 1977). According to Kohut, a child's self begins to develop at around 18 months and at that time significant others, called "selfobjects," must respond to the child's narcissistic needs in order to facilitate healthy development (Kohut, 1977). During growth, the child's grandiose self requires confirmatory and validating experiences from the selfobject, as well as balanced boundary and limit setting which will frustrate the child (Kohut, 1977). As the child continues to develop, he/she will require the opportunity to idealize the selfobject in order to experience and participate in perceived strength, stability, calmness, and reintegration of the self in times of fragmentation (Kohut, 1977). Lastly, the child will engage in twinship relations with others and focus on identification and similarities which will later lead to differentiation (Kohut, 1977). As the child deals with normative frustrations in the environment, transmuting internalizations occur where gratifying responses of the mother are internalized into the child's internal psychological world (Kohut, 1977). These internalizations allow the child to internalize productive functions that the parent originally performed (Kohut, 1977). Pervasive empathic failures on the part of the selfobject will hinder full development of a cohesive self and facilitate disturbances in self-esteem regulation, hypersensitivity to failure, criticism, rebuffs, and

disappointments, and result in selves that are fragmented, overstimulated, understimulated, or overburdened (Kohut, 1977). Such impairments can significantly impact an individual's character style, and shape personalities that are constantly looking for selfobjects to be mirror or be admiring, seeking selfobjects that can merge to provide calming functions, or personalities that shun social contact to name a few (Kohut, 1977).

Fonagy illustrated that similar to Bowlby, Kohut replaced the drives of classical analysis with relational entities, requiring the attuned responsiveness from a significant other in order to develop a cohesive self (1999). According to Fonagy, Kohut's theory of internalizations is similar to Bowlby's concept of internal working models, where for Kohut, representation of the child as omnipotent and the parent as perfect can become fixed, detrimental psychological structures (1999). Meanwhile differences take the form of Kohut emphasizing self cohesion rather than a biologically determined relationship pattern, the fact that Kohut places self-disintegration anxiety above anxiety about object loss, and Kohut's focus on concepts such as self and narcissism which are not addressed by attachment theory (Fonagy, 1999).

Lastly, Harry Stack Sullivan was a major contributor to the interpersonal approach, which then laid the foundation for relational/intersubjective theories. According to Sullivan, an infant is born with expansive human potentialities that later develop into a self-system, the part of the personality arising from significant interactions with others (1954). Sullivan saw the infant as striving to use the system to defend against anxiety and stressed the importance of actual two-person exchanges in this process (1954). He argued that early problematic experiences with the parents, such as strict

toilet training, can significantly impact average human development (1954). He also stressed the importance of imaginary others and fantasized characteristics of the other that significantly influence the individual and called this phenomena "parataxic distortions" (1954). Sullivan did not emphasize the importance of intrapsychic conflict, unconscious fantasy world, or even motivational drives so much as he stressed the importance of actual interactions between people and the ability to observe, even participate in those interactions.

Fonagy discussed overlap between the two theories in that a) both Bowlby and Sullivan emphasized the importance of early parent-child interactions and both take a relational approach underlying human development and b) both argue for a representational system which is created out of the relationship with the primary caregiver, with parataxic distortions looking very similar to Bowlby's concept of internal working model (1999). Mauricio Cortina (2001) concurred that both Bowlby and Sullivan conceptualized early interpersonal experiences with the caregiver as formative and focused on Sullivan's use of personifications, tolerably accurate portrayals of interactions with primary caregivers. She also stated both theorists devoted similar importance to defensive operations, such as the role of selective exclusion according to Sullivan and segregated systems in Bowlby's work (2001). The primary distinction between attachment theory and interpersonal theory appears to be the lack of interpersonal emphasis on biological drives and need to physical contact, proximity, and comfort as motivating behavior (Cortina, 2001; Fonagy, 1999).

In conclusion of this theoretical discussion, Fonagy has clearly outlined how psychoanalysis can continue to clearly contribute to attachment theory. He argued that attachment theory could expand upon taking into consideration systematic distortions of the child's perception of the external world to include the fact that different infants may encode actual experiences in unique ways due to fantasies, internal affects, and conflicts (1999). This line of reasoning also echoes the positions of most object relations theorists who focus more on adults' mental representations of self and others in close relationships, which are believed to be an extension of the early relationships with parents (Levy, Blatt & Shaver, 1988). Also from a developmental line of reasoning, internal working models may be in conflict and/or exist in some type of hierarchy with varying degrees of consciousness (Fonagy, 1999).

The internal working models may be more malleable than originally theorized in relation to the child's maturing representational system (Fonagy, 1999). Yet another developmental issue includes what appears to be the categorical and fixed nature of attachment classification, without considering how the environment may impact attachment status, particularly at certain ages (Fonagy, 1999). For example, Levy, Blatt, and Shaver have recognized the typical AAI study finds proportions of secure adults to be around 65% of a sample (1988). This maybe due to the fact that the AAI was designed to make predictions based upon the Ainsworth Strange Situation classification system, which typically found 65% of American middle-class children to be secure in study populations (Levy, et al. 1988). Meanwhile, in a twenty year longitudinal study completed by Waters, Merrick, Treboux, Crowell, & Albersheim (2000), the authors

found 72% of the infants received the same attachment classification in early adulthood. Negative life events or environmental factors, such as loss of parent, parental divorce, life-threatening illness of parent or child, parental psychiatric disorder, or physical or sexual abuse by a family member were important factors in 44% of the cases that changed classification categories (Waters, et al., 2000). While psychoanalytic theorists may be very attuned to environmental influences or factors that can impact an individual negatively, they also appear more comfortable in recognizing behavior patterns, both normative and maladaptive, while attachment theorists still conceptualize attachment status more as theoretical constructs (Fonagy, 1999). This translates into the rich psychoanalytic understanding of psychopathology, which remains to be explored by attachment theory (Fonagy, 1999)

Currently, research in the arenas of psychoanalytic theory or object relations theory has been next to impossible due to an inability to scientifically measure unconscious processes or internalized object relations. While researchers have employed the use of projective or semi projective measures, such as the Rorschach Inkblot Test or The Thematic Apperception Test (TAT), such literature has been met with mixed criticism due to a lack of empirically validated and consensually agreed upon scoring systems. Projective measures involve the presentation of ambiguous, or semi ambiguous stimuli (i.e., a vague pictorial depiction of people) with the intention of tapping an individual's unconscious processes through the stories told in response to the image. Although Bowlby significantly contributed to the field of psychology through emphasizing attachment styles in children, little research has been completed which

actually attempts to measure internal working models. The majority of research relates a child's attachment style to various emotional and behavioral outcomes without ever being able to document how the internal working model serves to influence the child in reaching the outcome. To provide some examples, a brief review of research on child attachment will be discussed next, followed by adult attachment and object relations research.

Research on Children's Attachment

The following articles neatly exemplify the important role of maternal care in relation to infant security and later child emotional and behavioral development. In a study of 129 Israeli infant mother dyads, mothers' maternal responsiveness was significantly related to infant attachment status as indicated by the Ainsworth Strange Situation (Koren, Oppenheim, Dolev, Sher, & Etzion-Carasso, 2002). The Ainsworth Strange Situation is a frequently used laboratory observation procedure designed to place infants into either a secure or insecure attachment status based upon behavior displayed when separated and reunited with mother (Koren et al., 2002). The Strange Situation has been found to be both highly reliable and valid (Koren et al., 2002). An analysis of variance revealed that mothers rated as more insightful of their infants' internal experiences were rated as more sensitive in their attunement to their infants' needs and were more likely to have securely attached infants than were mothers not classified as insightful, as measured by the Insightfulness Assessment (Koren et al., 2002). The Insightfulness Assessment is a series of interview questions presented to the mother

asking her to make observations on her own videotaped interactions with her infant (Koren et al., 2002). Such findings hold across cultures as demonstrated by Pasoda, Jacobs, Richmond, Carbowell, Alzate, Bustamante, & Quicino (2002) in their study of 60 US and 61 Colombian mother-infant dyads. They used the Maternal Behavior Q Sort, an observational method with an inter observer reliability of .83 and the Strange Situation. Maternal sensitivity was defined in terms of sensitivity in responding to infants' signals, ability of the mother to take the infant into consideration, the positive emotional tone directed toward the infant, and the ability to cooperate with the infant. It was significantly correlated with infant security status, indicating that mothers higher in maternal sensitivity were more likely to have infants with secure attachment styles than mothers lower in maternal sensitivity (Pasoda et al., 2002). This finding held across cultures (Pasoda et al., 2002).

Research on 94 preschool age children demonstrated through use of the Attachment Q Set and teacher and peer ratings that boys and girls less secure in their attachments will show increased anger and aggression in a preschool setting, while boys who are securely attached are more popular in school (DeMulder, Denham, Schmidt, & Mitchell, 2000). A longitudinal study designed to measure emotion regulation abilities of six year old boys, by observing their behaviors on frustrating tasks, indicated that securely attached boys were more likely to engage in emotion regulating behaviors such as self distraction, waiting quietly, and asking questions about the tasks than insecurely attached boys (Gilliom, Shaw, Beck, Schonberg, & Lukon, 2002).

A seven-year, longitudinal study of 146 internationally adopted children demonstrated that higher quality of the child-mother relationships in terms of attachment security (as measured by the Strange Situation) and maternal sensitivity (assessed through behavioral observation) predicted better social development, ego control, and cognitive development in 7 year old children; as measured by standardized scales such as IQ tests, the Child Behavior Checklist and the Teacher's Report, to name a few (Stams, Juffer, & van Ijzendoorn, 2002).

Further research with 41 children between the ages of 2.5-6 years demonstrated that secure attachment to the mother correlated with overall emotional understanding (Laible & Thompson, 1998). Meanwhile a hierarchical regression indicated that secure attachment predicted increased understanding of negative emotions in securely attached children vs. insecurely attached children (Laible & Thompson, 1998). This particular study measured child attachment through the perception of the mother as she responded to the Child Attachment Q-Set, 90 descriptive statements of the child's behavior, which has been demonstrated to be psychometrically sound. Emotional understanding, on the other hand, was assessed through perspective taking tasks such determining the affect acted out by puppets (Laible & Thompson, 1998).

Additionally a longitudinal study of 108 French child-mother dyads through use of behavioral observations, standardized tests, and self reports indicated that 8 year old securely attached children demonstrated better communication, cognitive engagement and mastery motivation than insecurely attached children who scored lowest on mastery motivation (Moss & St. Laurent, 2001). In a review, Lyons-Ruth (1996) summarized

attachment related-studies where disorganized attachment--a form of insecure attachment where the child appears frightened of the caregiver and displays disturbed behaviors in the presence of the caregiver--predicted aggression in school-age children. To exemplify, 25 preschool boys referred to a psychiatric clinic due to disruptive behavior disorder were matched with normally functioning boys and were rated on attachment status through behavioral observation (DyKlyen, 1996). Analysis revealed that attachment status of the boys was associated with the clinic status (DyKlyen, 1996).

This research reviewed the importance of maternal responsiveness to infant security attachment, and traces both positive and negative child emotional and behavioral outcomes as related to the attachment status, measured in a variety of ways. The research also emphasized cross-cultural understandings and the importance of attachment status, from infancy to school age. According to the theories of Bowlby, Freud, and Winnicott, one could argue that these well adapted children with secure attachment styles have functioning internal working models, low conflict among intrapsychic structures such as id, ego, and superego, and positive internalized object representations of their mothers. But little research to date has been able to document such complex, and often unconscious psychological processes. Simultaneously, one could argue that children who are insecurely attached most likely form maladaptive internal working models, demonstrate high conflict among id, ego, and superego, and have internalized negative object representations of their mothers. Only recently, with the development of more complex and sophisticated instruments, have researchers been able to empirically begin to tap unconscious processes in adults.

Research on Adult Attachment Status and Object Relations

The development of the Adult Attachment Interview (AAI) by Main and colleagues has proven to be a valid and reliable interview method to assess adult's attachment style as a function of their internal working model (Fonagy et al., 1996). The AAI is now recognized as the "gold standard" for measuring attachment in adults (Fonagy et al., 1996). In the AAI scoring system, there are four major adult attachment categories: 1) autonomous (valuing and coherent of attachment); 2) dismissive (idealizing, derogatory, and cut off from attachment experiences); 3) preoccupied (passive, angry, and entangled by past experiences); 4) and unresolved (unresolved and/or disorganized concerning traumatic or loss attachment experiences) (Fonagy, et al., 1996). The interview method encourages subjects to conjure and assess attachment related autobiographical memories in order to assess the individual's current working model of attachment relationships (Bakersman-Kranenburg & van IJzendoorn, 1993). Eighty-three mothers participated in a project designed to study the discriminant validity and reliability of the AAI (Bakersman-Kranenburg & van IJzendoorn, 1993). Results indicated the AAI was independent of non-attachment related autobiographical memory, verbal and performance intelligence, and social desirability, while AAI classifications were reliable over a two month period (Bakersman-Kranenburg & van IJzendoorn, 1993). The development of the AAI has provided an opportunity to study adult attachment styles with a preliminary emphasis on relation to children's attachment status, clinical diagnoses, and treatment.

Slade, Belsky, Aber, & Phelps (1999) explored the relationships between mothers' representations of their relationships with their children, using the Parent Development Interview, adult representation of attachment, and observed mothering. These researchers determined that autonomous mothers represented their relationships with toddlers in ways that were more coherent and conveyed more joy and pleasure in the relationship than did dismissing and preoccupied mothers, while dismissing mothers expressed more anger in the Parent Development Interview (1999). The researchers concluded that mother's state of mind regarding attachment and her own attachment experiences related to the way she perceived her relationship with her child and could influence actual parenting techniques (1999). Additional research has demonstrated that mothers' attachment status and infant security were associated with emotional availability scores as measured by behavioral observations of the mother-infant dyad (Aviezer, Sagi, Joels, & Ziv, 1999). Results indicated that security of infant attachment and mothers' autonomous representations of attachment were associated with higher emotional availability scores, while poorer emotional availability was observed in dyads of insecurely attached infants and mothers classified as insecure regarding attachment status, thus providing an argument that adult attachment status will behaviorally influence parenting and consequent child attachment status (Aviezer, et al., 1999).

George & Solomon explored experiences of caregiving, adult attachment status, and child attachment status and determined significant concordance between ratings of maternal representations of caregiving and child attachment, concordance between mother's current representation of attachment and her representation of caregiving, and

concordance between adult attachment classifications and child attachment classifications (1996). Autonomous mothers who had a maternal representation for a secure base had children who were securely attached, detached mothers with rejecting representations had avoidant children, while enmeshed mothers who had uncertainty in their representations had ambivalent children (George & Solomon, 1996). Further evidence was provided by Cowan, Cohn, Cowan, & Pearson (1996) who found, in a study of twenty-seven mothers and twenty-seven fathers, that aspects of the adult attachment status of the parents acted as strong moderators in predicting teachers' descriptions of children's internalizing and externalizing behaviors. More specifically, men's loving and anger ratings on the AAI were associated with their parenting style and child's consequent level of externalizing behavior, while women's loving and anger scores on the AAI were associated with parenting style and child's consequent level of internalizing behavior (Cowan, et al., 1996).

Adult attachment status has not only been linked to parenting styles and child behavior outcomes, but also to adult psychopathology. Pianta, Egeland, & Adam studied adult attachment classifications in relation to symptoms reported on the Minnesota Muliphasic Personality Inventory-2 and found that dismissing mothers reported little psychiatric distress and had the lowest scores on anxiety, while preoccupied mothers scored highest on indices of self-perceived distress and relationship problems (1996). Fonagy et al. (1996) compared the patterns of attachment and psychiatric status in 82 nonpsychotic inclients and 85 case-matched controls using the AAI and found that psychiatric clients were more likely to be classified as preoccupied and unresolved with

respect to loss or abuse than nonpsychotic clients. More specifically on Axis I, anxiety was associated with an unresolved status, and AAI scales were able to distinguish depression and eating disorders (Fonagy et al., 1996). Meanwhile on Axis II, borderline personality disorder was related to a disorganized attachment style (Fonagy et al., 1996). Individuals rated as dismissing of attachment were more likely to show improvements in psychotherapy than those rated as preoccupied (Fonagy et al., 1996). Such research implicitly sets the stage for future research in the area of object relations, since object relations theorists argue that psychopathology is intrinsically indicative of disturbed or distorted object relations.

Diamond, Clarkin, Levine, Levy, Foelsch, & Yeomans (1999) were also able to document in their preliminary work with two subjects, that borderline personality disorder tends to carry features of an insecure and disorganized attachment style, with poorer object relations being intimately tied to symptomololgy of the insecure attachment. With the aid of Transference-Focused Psychotherapy (TFP), an individual's insecure status can shift to autonomous/secure, as measured by the AAI (Diamond et al., 1999). These two preliminary studies are the only work to date incorporating attachment theory and research methods to further a developmental understanding of psychopathology and clinical implications. Research addressing clinical implications inherently tap object relational processes, but empirical evidence for the role of object relations is still significantly lacking. Diamond et al. (1999) conjectured that an individual's images of self and others, as measured through object relations inventories, are derived from early attachment history and play a role in the internal working models

as manifested through significant interactions with others. Although the research could not draw conclusive findings due to the small sample size, the researchers concluded that insecure attachment categories may encompass individuals with different levels of object relations development, and that additional measures of the level and quality of self- and object representations may provide relevant information regarding therapeutic interventions (Diamond, et al., 1999).

Levy, Blatt, and Shaver (1988) stated that overall, adult attachment researchers have not investigated or incorporated the ideas and measures developed by object relations theorists. These researchers attempted to document a clear relationship between attachment theory and object relations through exploring undergraduates' mental representations of their parents through the use of attachment self-report inventories and thematic content and structure of parental description narratives. They found that securely attached participants had representations of parents that were differentiated, elaborated, benevolent, and less punitive. Anxious-ambivalent participants had representations that were benevolent, but also punitive. Dismissing participants described their parents with less differentiation, more punitiveness and malevolence, whereas fearful participants also characterized representations as punitive and malevolent, but with clearer differentiation and complexity. Levy, Blatt, and Shaver concluded that understanding the internalized parental representations associated with each attachment style contribute to increased knowledge of social behavior (1988).

Previous research has demonstrated that object relations deficits can distinguish individuals with borderline personality disorder from schizoaffective and schizophrenic

groups (Bell, Billington, Cicchetti, and Gibbons, 1988). It has also been found that individuals with borderline personality disorder experience the object relational world in a way that is different from the perception of normals and depressives (Stuart, Westen, Lohr, Benjamin, Becker, Vorus, and Silk, 1990). Tramanto, Javier, & Colon (2003) also found that object relations can discern individuals diagnosed with borderline personality disorder from controls, as well as delineate various subgroups of borderline personality disorder. Through use of various object relations measures these researcher found evidence that the internal world of an individual with borderline personality disorder is highly malevolent, while providing documentation for three subgroups moving away (those who may have more engulfment fears), moving toward (those who seek a fantasy external object to contain them, and moving against (those who may experience more anger and rage) (Tramanto et al., 2003).

Further, the newer empirically validated Social Cognition and Object Relations Scale (SCORS), to be used when rating an individual's Thematic Apperception Test (TAT) stories, can successfully distinguish more pathological responses in the TAT stories, differentiating borderlines, major depressives, and normals by illustrating their object relations (Westen, Lohr, Silk, Gold, and Kerber, 1990). The SCORS has been determined to have adequate inter-rater reliability and construct validity, with The Construct of the Object measure typically used with the Rorschach inkblot test (Hibbard, Hilsenroth, Hibbard, & Nash, 1995) The SCORS was originally designed to tap object relations through measuring unconscious representations of people, emotional tones of relationships with people, and self-concepts (Westen et al., 1990). Westen initially

argued that the TAT was a good instrument for measuring object relations due to social aspects of the stimuli which allows access to cognitive and affective motivational patterns to emerge in narrative response to the cards (Westen, 1991). Westen designed his scale to reflect object relational theories of representation of people in relationships, affects, conflicts, attributions of causes of behaviors, and capacity for investing in relationships as implied by Melanie Klein, Otto Kernberg, and W.R.D Fairbairn (Westen, 1991). Currently the SCORS has progressed into an eight dimension scale including: Complexity of Representation of People, Affective Quality of Representations, Emotional Investment in Relationships, Emotional Investment in Values and Moral Standards, Understanding of Social Causality, Experience and Management of Aggressive Impulses, Self-Esteem, and Identity and Coherence of Self on a seven point likert system, with lower scores indicating poorer object relations (Westen, 1995). Ackerman, Clemence, Weatherill, & Hilsenroth (1999) used the updated version of the SCORS to successfully differentiate among individuals diagnosed with antisocial personality disorder, narcissistic personality disorder, borderline personality disorder and Cluster C personality disorder. They were able to achieve Spearman-Brown interrater reliability rates of .74 or above (with the exception of Identity and Coherence of Self) (Ackerman, et al., 1999). To date, no research has addressed the relationship between adult attachment status and object relations as measured by the SCORS.

This dissertation theoretically explored similarities and dissimilarities among attachment theory, classical psychoanalytic theory, and object relations. An integration of these theories would emphasize early parent child interactions as fundamental to the

internalization of cognitive and affective representations of the caregiver and the nature of the caregiving relationship, in order to form understandings of self and others. Internalizations can be hindered, distorted, or disrupted through inadequate parenting or traumatic experiences. In order for the infant to manage the resulting physiological state of fear or anxiety, defensive cognitive and affective processes are used which often result in distorted experiences of self and other, creating implications for later pathology. A weakness in attachment theory involves a clear definition of internal working models. How do these unconscious processes and defensive patterns serve to shape an individual's personality and psychological functioning in daily experience and/or relationships with others? Most attachment research relates the attachment status to some other aspect of psychological functioning without clearly exploring the processes underlying how and why individuals have different attachment statuses and consequently different internal working models. Only recently, with the development of the AAI and SCORS, both designed to tap unconscious processes, is psychology at a place and time where research attempting to integrate the described theories can occur.

The AAI is highly recognized as the most effective measure of adult attachment status, in lieu of self-report measures, because it a) incorporates a four category system with unresolved status, instead of a typical three category system, b) taps unconscious processes to determine status, and c) is not subject to a social desirability factor common to most self-report measures. Unfortunately the AAI is a laborious instrument which can take an hour to an hour and a half to administer, four to six hours for transcription, involves a complex scoring system, can be difficult to achieve interrater reliability, and

provides a limited understanding of psychological processes through only providing an attachment classification.

Meanwhile George, West, and Pettem (1999) have designed a new methodology using narratives given in response to semi projective stimuli that are designed to elicit attachment representations, known as the Adult Attachment Projective (AAP). This is the first projective measure of adult attachment status and uses variables such as coherency of narrative, relatedness, agency of self, and defensive processing to designate four major adult classification groups: secure, dismissing, preoccupied, and unresolved (George & West, 2001). The eight cards of the AAP are administered in about half an hour, involve a more accessible scoring system than the AAI, uses less time in transcription, and provides more information regarding internal processes, such as agency of self and defensive processing. Preliminary validation research has shown AAP interjudge reliability for secure vs. insecure classifications was .93 (kappa=.73, $p<.000$); interjudge reliability for the four major attachment groups was .86 (kappa=.79, $p<.000$); convergence between AAP and AAI secure vs. insecure groups was .92 (kappa=.75, $p<.000$); convergence for the four major AAP groups with the AAI groups was .85 (kappa=.84, $p<.000$) (George & West, 2001).

Since the AAP is a relatively new instrument, little research has been completed using this measure. Currently, West & George (2002) have found a strong association between female dsythmic depression and the preoccupied category as measured by the AAP.

This dissertation attempted to provide a clearer understanding and definition of internal working models by relating adult attachment classification as measured by the AAP with object relations representations as measured by the TAT and SCORS. Further understanding of unconscious processes which underlie adult attachment classification can be illustrated by empirically investigating how attachment status relates to an individual's understanding of self and others' internal states, the affective nature of relationships, the level of emotional investment in relationships, understanding of social causality in relation to interpersonal events, and the experience and management of aggressive impulses, as measured by the SCORS. This research carries inherent importance in further illustrating concepts of attachment theory, providing additional empirical evidence for object relations theory, and providing a more comprehensive picture of human development with implications for understanding and treating psychopathology. This study specifically hypothesized that individuals classified as securely attached by the AAP coding system would have significantly higher ratings on the eight SCORS dimensions of the TAT than individuals with insecure attachment styles.

II. Method

Participants

100 undergraduate students were recruited from introductory and upper level psychology courses at the University of Tennessee, Knoxville to ensure a distribution of ages. Three subjects were not used in the statistical analyses due to missing information. Data from 97 students (28 men and 69 women, mean age = 21 years, min. = 18 years, max. = 35 years, and STD = 3.86 years) was used in the study. Ethnic backgrounds included 87 Caucasians, 7 African Americans, and 3 Asians. Students received extra credit in their psychology courses in return for their involvement. Subjects were treated in accordance with the "Ethical Principles of Psychologists and Code of Conduct" (American Psychological Association, 2002). The Institutional Review Board of the university waived written informed consent because there was no identifying information on the data collected and no foreseeable risks to the subjects.

Materials

The Adult Attachment Projective (AAP) is comprised of eight drawings, a neutral scene to aid the individual in becoming accustomed to the test, and seven scenes specifically designed to elicit attachment related responses (i.e., illness, solitude, separation, and abuse) (George & West, 2001). The primary researcher in this study attended an extensive, formal, two-week training seminar conducted by the test developer of the Adult Attachment Projective (AAP), which addressed administration, scoring, and interpretation of the AAP. The primary researcher then trained four other graduate students in the clinical psychology doctoral program over the span of a semester, meeting

for two hours on a weekly basis to review practice scoring. Analyzing the AAP emphasized three aspects of the story narrative: discourse (whether or not the individual may be overwhelmed by attachment related distress to the degree that they share Personal Experiences, and level of Coherency in the narrative, mainly measured by Quality of the plot, Quantity of the story length); story content and action, as illustrated by Agency of Self (degree that self is moving psychologically or behaviorally toward integration or understanding), Connectedness (character's desire to be with others), and Synchrony (interactive behavior between characters); and defensive processing, primarily through Deactivation (defensive exclusion that enables the individual to diminish, dismiss, devalue, or minimize the importance or influence of attachment stimuli), Cognitive Disconnection (defensive exclusion that splits attachment information into opposing images or story lines, thus creating confusing and distance from attachment related stimuli), and Segregated Systems (extreme form of defensive exclusion that cognitively segregates extremely painful emotions associated with loss or trauma from consciousness, often resulting in mental dysregulation and disorganization) (George & West, 2001).

Prototypical patterns of the adult attachment classification system are as follows (George & West, 2001):

1. *Secure* individuals demonstrate high Agency of Self in depicting characters which have the ability to draw upon internal resources and attachment figures to address attachment related stress while showing the importance of relationships with high Connectedness, as well as providing descriptions of

reciprocal interactions with high Synchrony. These individuals do not need to rely heavily on defensive processes to cope with attachment distress or anxiety and they demonstrate high to moderate Coherence while maintaining clear self-other boundaries as evidenced by low Personal Experience.

2. *Dismissing* individuals noticeably avoid or ignore direction expressions of attachment in their narratives and will take action themselves rather than relying upon attachment figures to alleviate anxiety, resulting in moderate levels of Agency of Self. These individuals tend to portray characters which have low Synchrony and moderate Connectedness and will typically utilize defensive Deactivation, facilitating lower Coherency in their stories.
3. *Preoccupied* individuals also do not use attachment to resolve distress, and frequently describe characters incapable of any action at all, resulting in low Agency of Self. The characters depicted are often basically alone, low Connectedness with poor Synchrony, and typically fall upon Cognitive Disconnection defensive processes to address anxiety. This form of defensiveness often results in stories which are low in Coherence and suffer from lengthy descriptions of Personal Experience.
4. *Unresolved* individuals portray stories which are marked by the individual's failure to reorganize or integrate a Segregated System in stories which are typically low in Coherence.

The primary researcher also trained three other clinical psychology graduate students in administration, scoring, and interpretation of the Thematic Apperception Test (TAT)

as measured by Drew Westen's Social Cognition and Object Relations Scale (SCORS) (1995). Training lasted an entire semester, with one-hour weekly meetings to review practice scoring. The SCORS is typically based on five cards featuring individuals alone and individuals together. Cards 1, 2, 3BM, 4, and 13MF were used, as the standard card selection from other SCORS studies. The TAT was scored by the latest version of SCORS (Westen, 1995), which taps eight dimensions of unconscious object relations. Each variable is scored on a 7-point anchored rating scale ranging from 1 (indicating more pathological responses) to 7 (indicating healthier responses) (Ackerman, et al., 1999). The eight dimensions are as follows (Ackerman, et al., 1999; Westen, 1995):

1. Complexity of Representation of People-assesses subject's relational boundaries and ability to integrate both positive and negative attributes of the self and others, including richness of the representation (Ackerman, et al., 1999).
2. Affective Quality of Representations-assesses subject's expectations from others in relationships and how the client describes significant relationships (Ackerman, et al., 1999).
3. Emotional Investment in Relationships-assesses subject's level of commitment and emotional sharing in relationships (Ackerman, et al., 1999).
4. Emotional Investment in Values and Moral Standards-assesses subject's ability to behave in a situation without a sense of guilt or remorse versus a willingness to challenge moral questions in an thoughtful fashion (Ackerman, et al., 1999).
5. Understanding of Social Causality-assesses subject's understanding of why people behave as they do (Ackerman, et al., 1999).

6. Experience and Management of Aggressive Impulses-assess a subject's ability to control and appropriately expression anger (Ackerman, et al., 1999).
7. Self-Esteem-assesses affective quality of self-representation (Ackerman, et al., 1999).
8. Identity and Coherence of Self-assesses a subject's level of fragmentation and integration (Ackerman, et al., 1999).

Subjects were administered the AAP, followed by the TAT, and lastly a demographic questionnaire, which included questions about loss due to death or separation. The AAP was always administered first in accordance with directions outlined by the test constructor in the training seminar, since the AAP is specifically designed to tap an individual's attachment system (Carol George, Personal Communication, 2003). Data were collected in designated assessment rooms at the University of Tennessee Psychology Building, where the examiner hand documented subjects' responses verbatim. Testing typically lasted an hour to two hours and was completed in one session. At the end of the data collection session with the subject, the purpose of the study was explained and any questions were answered.

The protocols were randomly distributed to the judges for scoring. TAT protocols were scored separately from the AAP protocols. When scoring the TAT protocols, judges were instructed to score across similar cards rather than across entire protocols to prevent the halo effect. The scores for each dimension were then averaged across the five cards to create a single average score on each dimension for each subject. Scoring an AAP protocol in its entirety rather than across cards is the accepted method of scoring

(Carol George, Personal Communication, August 2003). To calculate reliability rates, the five AAP raters all scored the same subsample of twenty protocols selected from the data. Twenty TAT protocols were also randomly selected and scored by all four of the TAT raters. Inter-rater reliability among the judges was determined using multi-rater kappa for the AAP due to the categorical nature of the variable, while two-way mixed intra-class correlation coefficients were calculated for the continuous variables on the SCORS. Both analyses show excellent reliability rates, with most ranging from .81 thru .96 (See Table 1, Appendix A[1]). After reliability analyses were completed four protocols from each AAP judge and five protocols from each TAT judge were randomly selected to be used in the statistical analyses. The remaining protocols were randomly distributed to the raters for completion of scoring. Raters scored an average of twenty AAP protocols and twenty-five TAT protocols of the entire data set.

[1] All tables are located in Appendix A.

III. Results

Final classification of adult attachment styles revealed a disproportionate number of individuals falling into the four categories (secure = 44, dismissive = 11, preoccupied = 9, and unresolved = 33, Total N = 97). Dismissive, preoccupied, and unresolved all reflect insecure states of mind regarding attachment and were therefore collapsed into one group for the purpose of more equal comparison to the secure group (secure = 44 and insecure = 53, Total = 97). Box's Test of Equality of Covariance Matrices shows homogeneity of covariance between the independent groups (Box's M = 49.41, F (36, 61) = 1.25, p = .15). Levene's Test of Equality of Error Variances shows the dependent variables have equal group variances (See Table 2, Appendix A).

Prior to testing the hypothesis that secure individuals would score higher on the SCORS measure of object relations than insecure individuals, demographic data were taken into consideration to eliminate the possibility of covariance. Demographic factors that may influence the dependent variables were gender, age, whether parent(s) raised the subject, loss of parent due to death or separation, parental divorce, personal injury or illness, and recent loss of someone close. Age was divided into three categories, students in their late teens, twenties, and thirties. Many subjects indicated loss of someone close to them, other than a parent, in the past year while other subjects reported losses that occurred up to eighteen years ago. Descriptive statistics of how many years had passed since the loss indicated the mean number of years to be 2.74. With this information subjects were divided into two groups, those who had a meaningful loss in the past three years (N = 46) and those who did not experience a loss or the loss occurred over three

years ago (N = 51). Demographic information is shown in Table 3 (See Table 3, Appendix A). Pearson's r correlations reveal that demographic factors do not significantly relate to the dependent dimensions of object relations (See Table 4, Appendix A). In particular, whether a subject experienced a meaningful loss of someone other than a parent in the past three years or experienced parental divorce did not significantly relate to any of the dependent variables.

Contrary to popular literature, this sample has a surprisingly large number of individuals classified as insecure. To further illuminate this phenomenon, chi-square analyses were completed to assess patterns of secure versus insecure distributions in relation to meaningful loss of someone other than a parent, experience of parental divorce, and year in college. Analyses show there were no significant patterns among these categories (See Tables 5; 6, and 7, Appendix A).

Multivariate analysis of variance using Hotelling's Trace indicates a significant relationship between adult attachment status and object relations ($F(8, 91) = 3.2$, $p = .003$). Descriptive statistics including mean, standard deviation, and estimates of 95% confidence intervals are shown in Table 8 (See Table 8, Appendix A). Pairwise comparisons show a consistent pattern where secure individuals score significantly higher on the measure of object relations than insecure individuals on seven of eight SCORS dimensions (See Table 9, Appendix A). For example, individuals classified as secure in attachment status had significantly higher scores on Affective Quality of Representations than individuals classified as insecure (mean difference = .521, $p = .000$).

IV. Conclusion

The original hypothesis that secure individuals would score significantly higher on SCORS dimensions of object relations was supported by the results of this study. In reviewing the early works of John Bowlby, Sigmund Freud, and Donald Winnicott, there are clearly similarities in the theoretical models of attachment theory, classical psychoanalytic theory, and object relations. An integration of these theories would emphasize early parent-child interactions as fundamental to the internalization of cognitive and affective representations of caregivers and the nature of the caregiving relationships. The internalizations can be hindered, distorted, or disrupted through inadequate parenting or the experience of trauma. The infant in attempting to manage intense fear, distress or anxiety in the face of loss, separation, pathogenic parenting, or trauma will use cognitive and emotional defensive processes, resulting in distorted experiences of the self and other with implications for later pathology. The findings of this study provide an empirical link between attachment theory and object relations.

These findings also provide a more comprehensive understanding of John Bowlby's concept of the internal working model, while proving the utility of an innovative new psychological instrument, the Adult Attachment Projective. Application of the Social Cognition and Object Relations Scale with the Thematic Apperception Test in a normative population was also demonstrated. And lastly, additional outcomes of this study enabled initial explorations of other factors, such as experience of meaningful death other than a parent, parental divorce, and year in college, which may also impact attachment theory and an individual's attachment system.

John Bowlby originally defined the internal working model as a largely unconscious, internal set of cognitive and affective guidelines which influence an individual's understanding of self and other in the context of interpersonal relationships (Bowlby, 1988). According to Bowlby, the internal working model will influence the individual in perceiving events, anticipating future events, shaping emotional reactions, and constructing behavioral responses (Bowlby, 1973). The internal working model forms the individual's "state of mind" regarding attachment experiences and is inherently classified by measures of attachment.

According to George and West (2001), secure individuals have a "state of mind" regarding attachment where they can call upon internal resources or actual attachment figures in times of need or stress. These people value attachment relationships and the importance of close connections with others while maintaining clear and appropriate boundaries. They do not need to rely heavily on psychological defensive processes or mental distortions of reality to manage attachment related anxiety. Meanwhile individuals classified as insecure, have dismissing, preoccupied, or unresolved states of mind regarding attachment and will have difficulty absorbing the importance and beneficial impact of attachment relations for various reasons. Dismissing individuals may noticeably avoid or ignore direct expressions of attachment and focus on independence, personal strength, self-reliance, and social scripts or rules to manage attachment related anxiety. Preoccupied individuals frequently experience a sense of impotence in managing attachment related distress and tend to use forms of cognitive confusion, mental distortion, and contradictions as defensive maneuvers in the face of

anxiety. Lastly, individuals classified as unresolved typically have some type of personal trauma or loss in their history which may be psychologically unprocessed or only partially processed, and is reflected in their projective narratives. Research on children indicates that secure children have improved psychological health, with better emotional and behavioral functioning than insecure children (DyKlyen, 1996; Gilliom et al., 2002; Labile & Thompson, 1998; Moss & St. Laurent, 2001; Stames et al., 2002). Preliminary research on adults indicate the unresolved attachment style may be related to borderline personality disorder (Diamond et al., 1999; Fonagy et al., 1996).

Until now, there has been little empirical research on defining and measuring the internal working model. Fonagy (1999) has stressed the importance of providing further definition to the internal working model. He also indicates that attachment theorists present the internal working model and classifications of attachment as theoretical constructs, rather than observable patterns of behavior (Fonagy, 1999). In this sense, object relations and measures such as the SCORS has expanded beyond attachment theory in providing psychological differentiation to the cognitive and emotional processes of individuals experiencing different forms of psychopathology (Bell et al., 1988; Stuart et al., 1990; Tramanto et al., 2003; Westen et al., 1990). Bowlby's theories were originally informed by psychoanalytic and object relations theories, but he diverged from these influences to place more emphasis on actual physical experiences with the primary caregiver, such as separation or loss (1988). Although object relations theorists believe internalized mental representations stem from early caregiving relations, they place more emphasis on adults' associations, memories, and fantasies of those experiences (Levy,

Blatt, & Shaver, 1988). This divergence has almost become a limitation of attachment theory; unique fantasies, individual experience of affect or conflict, personal styles of encoding information, and systematic distortions of the external world, all of which may influence the development of the internal working model, do not seem to be taken into consideration (Fonagy, 1999). The findings of this study provide preliminary evidence that aspects of object relations can define differences in the internal working model between secure and insecure individuals.

Although it is not possible at this point in time to ascertain levels of conscious versus unconscious influences of object relations, rudimentary profiles of the internal working model can be constructed when interpreting the differences between secure and insecure individuals. The results show that secure individuals have significantly higher scores than insecure individuals on the SCORS dimensions of Complexity of Representation of People, Affective Quality of Representations, Emotional Investment in Relationships, Understanding of Social Causality, Experience and Management of Aggressive Impulses, Self-Esteem, and Identity and Coherence of Self. The fact that this project analyzed overall averages of SCORS dimensions across five Thematic Apperception Test cards in a young adult college sample speaks to the robustness of these findings.

The internal working model, as defined by object relations profiles of secure people in comparison to insecure people, would include higher scores on Complexity of Representation of People. The secure individuals have better ability to separate self from other, improved capacity to integrate both positive and negative qualities of self and

other, as well as more enriched description of self and others' internal feelings and thought processes. Secure people also have higher ratings on Affective Quality of Representations, meaning they tend to expect and describe more positive interactions with others in relationships than insecure individuals. Secure subjects portray higher levels of commitment and sharing in Emotional Investment in Relationships, as well as a broader grasp of human motivation and cause of events in Understanding of Social Causality. In Experience and Management of Aggressive Impulses, secure people more appropriately control and express anger, while maintaining more positive affective tones of self-representation in Self-Esteem. Lastly, secure subjects experience higher levels of integration and less fragmentation in Identity and Coherence of Self. Overall, these findings suggest that secure individuals have more complex, dynamic, and healthier object relations profiles than insecure individuals, with implications indicating different styles of internal working models.

These implications are inherently important in understanding human development, as well as conceptualizing and implementing treatment in psychotherapy. With a more comprehensive grasp of the internal working model, psychological and behavioral interventions can be more aptly modified at any level of treatment. Bowlby set out five therapeutic tasks, strongly informed by analytically oriented principles associated with the works of Fairbairn, Winnicott, Guntrip, Sullivan, and Kohut (1988). The first of these tasks is to provide a safe environment or secure base where the client can consider and explore painful aspects of life with a trusted companion (Bowlby, 1988). Hypothetically informed by the results of this study, secure individuals with

higher scores on Complexity of Representation of People, Affective Quality of Representations, and Emotional Investment in Relationships may have a clearer grasp on the intention and nature of the therapist, tend to expect positive interactions with and to be helped by the therapist, while easily engaging in an invested relationship with the therapist. An insecure individual may have difficulty relating to the therapist as an individual, perhaps believing that the therapist is there to tease, harm, or violate them or considers the therapist in a role to satisfy the client's needs and desires. The client may expect negative interactions with the therapist and have difficulty trusting and engaging with him or her. With this knowledge, a clinician may be more aware of a client's specialized needs and sensitivities and can tailor responses and interventions accordingly.

The second task is to assist the individual in investigating how he or she engages others in relationships, explores expectations of feelings and behaviors for self and others, discovers unconscious biases, and illuminates the ways an individual contributes to the experience of difficult situations (Bowlby, 1988). Here, a secure individual with better ratings on Complexity of Representation of People, Affective Quality of Representations, Emotional Investment in Relationships, and Understanding of Social Causality would significantly differ from an insecure individual. A secure client may more easily grasp the complexities and even conflicting nature of thoughts, feelings, and actions in self and others. The client may better understand his or her own motivations and factors which influence others, where an insecure individual may be more limited. A secure individual anticipating positive interactions may act more positively towards others, while an insecure individual may elicit negative responses from others through

acting in a way where the negative response is already expected. Due to maladaptive internal working models, an insecure individual could be less invested in relationships without an understanding of why or how this phenomenon is occurring. An insecure individual would also have a poorer understanding of chains of events, and may not fully realize the ramifications of interrelated events, such as the contributions of their own responses and behaviors. In this situation, a therapist might be prepared to give careful attention to adequate mirroring of the client's experience with specific re-iteration of events to increase the client's realization of unconscious influences and personal contributions.

According to Bowlby, the third task is aiding the client in examining the relationship between self and therapist, including perceptions and expectations of the therapist which may be strongly shaped by internal models of parents and self (1988). Differences in scores on Experience and Management of Aggressive Impulses, and Self-Esteem are salient here. An insecure individual may be less aware of the expectation of negative interactions with others, even with the therapist, or unaware of potentially disconnected, dissociated, repressed, or denied experiences of anger, which could be unknowingly directed towards the therapist. Also, an insecure individual may have increased feelings of poor self-esteem and negative perceptions of the self, or an unconscious experience of the self in a negative way. Thus, with an insecure individual treatment may be enhanced if the therapist has heightened awareness to transference responses which pull for negative interactions with the therapist and consciously or unconsciously direct anger towards the therapist. The therapist is encouraged to actively

listen for statements which indicate the client has poor self-representations, for example the client feels unworthy of being seen by the therapist, the client feels he or she does not deserve to be seen by the therapist, the client feels offended or harmed by the therapist in some fashion.

The therapist's fourth task is to help the client see that many current perceptions, expectations, feelings, and behaviors are products of events that occurred in childhood, while aiding the client in dealing with painful emotions that arise out of this growing awareness (Bowlby, 1988). Understanding of Social Causality and Emotional Investment in Relationships play a vital role during these times in therapy. A secure individual may have or come to have an insightful awareness of the impact of early childhood experiences in shaping one's personality, understanding of the world, and current day experiences with others, whereas an insecure individual may struggle to grasp this concept. It is often painful and difficult for clients to revisit the problematic times in their childhoods and to accept that aspects of those painful times continue to influence them today. Strong emotional investment in the relationship with the therapist is what enables clients to undertake this arduous task. The clinician must be prepared to illustrate meaningful links to the past as the events unfold in therapy, but in a timely fashion if the insecure individual is not able to process the therapist comments. A therapist should also be prepared that an insecure individual is most likely insecure because of the trauma experienced in the past and should expect intense affect to manifest itself in therapy. The therapist must continue to provide a safe, supportive, holding environment to the client. In many ways, the strength of the therapist in sitting with, tolerating, exploring, and

digesting overwhelmingly strong affect with the client is what maintains the therapeutic alliance.

And lastly the fifth task of the therapist is to enable the client to recognize that images or models of the self and others are derived from the past, but are no longer appropriate to the present and/or future. The client will have better understanding of self and others and cease being imprisoned by their past unconscious influences, enabling him or her to feel, think, and act in new ways (Bowlby, 1988). According to Bowlby, all of these tasks are interrelated and many tasks intertwine in even one session (Bowlby, 1988). The previously mentioned four tasks and corresponding measures of object relations appear to culminate in this final task. But specific to this hoped for fruition of therapy, seems to be the role of Identity and Coherence of Self. A secure individual may already have a strong sense of identity, with less experience in fragmentation of the self and have the resources to connect with the therapist, engage with and explore with therapist and progress through these tasks of therapy in a steady fashion. Meanwhile an insecure individual may require considerably more time in establishing an alliance with the therapist, trusting the therapist, and experiencing the therapist in a realistic and grounded fashion. Some of the time required for this slow and deliberate process may be due to poor sense of identity, which can inhibit exploring therapeutic grounds and learning from these new experiences. Even the most positive experience can be overwhelming and disorganizing to a severely damaged individual. The clinician should be prepared that an insecure individual is reforming their sense of identity that is

independent from the past experiences he or she might have had as a child, and insightfully respond to regressions with patience and understanding.

The conceptual discussion of Bowlby's five therapeutic tasks is enriched when adult attachment status, as measured by the Adult Attachment Projective, is taken into consideration with the Social Cognition and Object Relations Scale (Westen, 1995). In relating attachment status to object relations, the attachment classification can be translated beyond a construct of the mind, into behavioral factors influenced by the individual's unconscious, internal world. Even in a young adult college population, differences in the internal working models of secure and insecure individuals can be considered in a clinical framework of seven out of eight object relations dimensions. The only dimension of the SCORS which did not show a significant relationship between attachment status and object relations, was Emotional Investment in Values and Moral Standards. This result was not particularly surprising because the variable did not seem sensitive enough to detect differences in a young adult college population. There is also no specific literature in attachment theory which addresses ethical and moral behavior in relationship to guilt and remorse, or the ability to think abstractly about ethical issues or challenge conventionality and social norms, as being relatively different across the attachment categories.

The surprising aspect of this data set was the large number of individuals classified as insecure. A common concept in attachment theory, supported by empirical evidence, is the expectation that the majority of the population would have secure classifications that are stable over time (Levy, Blatt, & Shaver, 1998). Over half the

subjects in this sample qualified for some form of insecure classification. This discovery seems to support Fonagy's postulations that attachment status is more malleable than formerly believed as a fixed and categorical construct, and perhaps may be subject to environmental factors and developmental stages at certain ages (1999). Meanwhile, the same longitudinal study which provided evidence for the stability of adult attachment classification categories over a twenty year period also showed that 44% of the classifications which did change over time were related to negative environmental life factors, such as parental divorce (Waters et al., 2000). The researchers concluded there was support for Bowlby's position that attachment classifications are flexible and contingent upon environmental forces (Bowlby, 1988). It seemed possible that the attachment system of the subjects in this sample maybe overwhelmed or at least in a state of fluctuation due to a recent death of someone close, being in college, or having experienced parental divorce. This study was able to make some preliminary investigations of the relationship between adult attachment status and negative environmental factors.

According to the demographic information, many students in this population experienced the death of a grandparent, aunt, uncle, or close friend within the past three years. It appeared from the demographic sheet that this may be the individual's first experience with loss due to death, and quite possibly very disruptive to his or her attachment system if they are dealing with these issues for the first time in their life. Statistical analysis showed that an equal number of students in the secure and insecure categories experienced loss of someone close to them due to death in the past three years,

rather than a higher number of insecure individuals experiencing this type of loss, as one would expect. Perhaps an individual's attachment style of secure or insecure influences how they contend with loss and creates room for varied individual differences not captured in this analysis.

Being launched into a more independent setting, such as college, where many students may be experiencing their first real separation from family, may impact or disrupt the attachment system. Students have lost the security of their immediate family relations, as well as friends through childhood, and the predictability of a high school environment. They are thrust into a new world, where they must conquer the challenges of a college environment. As students navigate these new interpersonal relationships with teachers and peers, one could expect that their attachment systems would be disrupted. Yet again, statistical analysis showed that there were roughly equal numbers of secure and insecure individuals distributed throughout the freshman, sophomore, junior, and senior level classes. Although no definitive pattern could be determined through analysis, differences in attachment style may relate to how a student copes with college.

One could theorize that if attachment status is stable over time, an individual's attachment status and internal working model would aid them in contending with life's losses and transitions, such as death of someone close or entering college. But the question regarding the large number of insecure classifications remained unanswered. According to theory, maladaptive internal working models exist as a means to defend against the severe and overwhelming anxiety that results from loss or separation from a

parent. There are few students in this sample who actually lost a parent due to death or early separation from birth, but many students who received an insecure attachment classification. The effects of divorce or separation would seem to impact the attachment system, as the parent may no longer be available to the child in a stable and predictable fashion. Quite possibly the parent became unavailable to the child some time prior to the actual divorce because of the upheaval surrounding personal and marital issues. Again, statistical analysis revealed no meaningful distributions between secure and insecure classifications in relationship to parental divorce. There may be unique components to an individual's attachment system that shape how one deals with parental divorce that were not captured by this study.

It is important to keep in mind, that these explorations of other meaningful losses, year in college, and parental divorce are based solely on simple yes or no demographic questions. Previous research exploring other negative environmental life factors used detailed narratives from the AAI and also tapped more sensitive issues such as physical and sexual abuse (Waters et al., 2000). Overall, the large number of insecure classifications supports the idea that attachment classifications are malleable and subject to environmental factors or certain developmental ages. Although a few, simple demographic questions may not capture the full impact or nuances of these factors, this study brings attention to the need for future research in these areas. Other potential lines of research include using other various measures to tap different varying levels of conscious and unconscious emotional and behavioral functioning. For example, future research with this data set will include exploring the particular defensive processes of

secure and insecure individuals. Meanwhile, self-report inventories on most any dimension of psychological and behavioral processes may illuminate more differences between secure and insecure individuals by taking attachment classifications beyond a theoretical construct.

Limitations of this study include the sample size and ethnic and gender components of the population. A larger sample size would allow for more finely tuned comparisons among the insecure classifications of dismissive, preoccupied, and unresolved. This study had fewer males than females and extremely low ethnic diversity. Although no gender differences were detected, such findings might be impacted with a larger sample size of males. Regardless, it is next to impossible to generalize these results to other ethnic populations, and certainly more research is required in this area. One may consider the small mean differences as a potential weakness to the study. On the contrary, because the study found significant differences between averages in a young adult college population speaks to the strength of the study, as well as the ability of the Social Cognition and Object Relations Scale to detect subtle differences in a normative, young adult population. An excellent follow-up study would be to compare Adult Attachment Projective protocols and Thematic Apperception Test protocols from a clinical sample to this sample. In this way, a more comprehensive understanding of clinical implications could be empirically achieved, while larger mean differences would most likely be obtained.

Unique strengths of this study include contributing to a more comprehensive understanding of human development by investigating similarities across attachment

theory, classical psychoanalytic theory, and object relations. The research used an innovative new projective instrument, the Adult Attachment Projective, with the Thematic Apperception Test and Drew Westen's Social Cognition and Object Relations Scale, to empirically link attachment theory with object relations in a young adult normative population. The findings of this study expand attachment theory through further defining John Bowlby's concept of the internal working model with differences in object relations profiles of secure and insecure individuals, while providing initial evidence that attachment classifications are malleable across time.

List of References

Ackerman, S., Clemence, A., Weatherill, R., & Hilsenroth, M. (1999). Use of the TAT in assessment of DSM-IV cluster B personality disorders. Journal of Personality Assessment, 73 (3), 422-448.

American Psychological Association. (2002). Publication Manual of the American Psychological Association. Washington, DC: American Psychological Association.

Aviezer, O., Sagi, A., Joels, T., & Ziv (1999). Emotional availability and attachment representations in Kibbutz infants and their mothers. Developmental Psychology, 35 (3), 811-821.

Bakersmans, M. & vanIJzendoorn, M. (1993). A Psychometric study of the Adult Attachment Interview reliability and discriminant validity. Developmental Psychology, 29 (5), 870-879.

Bell, M., Billington, R., Cicchetti, D., & Gibbons, J. (1988). Do object relations deficits distinguish BPD from other diagnostic groups? Journal of Clinical Psychology, 44 (4), 511-516.

Bowlby, J. (1969). Attachment and Loss Vol. I: Attachment. New York, New York: Basic Books, Inc.

Bowlby, J. (1973). Attachment and Loss Vol. II: Separation. New York, New York: Basic Books, Inc.

Bowlby, J. (1980). Attachment and Loss Vol. III: Loss. New York, New York: Basic Books, Inc.

Bowlby, J. (1988). A Secure Base Parent-Child Attachment and Healthy Human

Development. United States of America: Basic Books, Inc.

Cassidy, J. (1998). Attachment and object relations theories and the concept of independent behavioral systems. Social Development, 7 (1), 120-126.

Cortina, M. (2001). Sullivan's contributions to understanding personality development in light of attachment theory and contemporary models of the mind. Contemporary Psychoanalysis, 37 (2), 193-238.

Cowan, P., Cohn, D., Cowan, C., & Pearson, J. (1996). Parents' attachment histories And children's externalizing and internalizing behaviors. Exploring family systems models of linkage. Journal of Consulting and Clinical Psychology, 64 (1), 53-63.

DeKlyen, M. (1996). Disruptive behavior disorder and intergenerational attachment Patterns a comparison of clinic-referred and normally functioning preschoolers and their mothers. Journal of Consulting and Clinical Psychology, 64 (2), 357-365.

DeMulder, E., Denham, S., Schmidt, M., & Mitchell, J. (2000). Q-Set Assessment Of attachment security during the preschool years: Links home to school. Developmental Psychology, 36 (2), 274-282.

Diamond, D., Clarkin, J., Levine, H., Levy, K., Foelsch, P., Yeomans, F. (1999). Borderline conditions and attachment: A preliminary report. Psychoanalytic Inquiry, 19 (5), 831-884.

Freud, S. (1895). Project for a scientific psychology. In P. Gay (Ed.), The Freud reader (pp. 86-89). New York, NY: W.W. Norton & Company, Inc.

Freud, S. (1911). Formulations on the two principles of mental functioning. In P. Gay (Ed.), The Freud reader (pp. 301-309). New York, NY: W.W. Norton & Company, Inc.

Freud, S. (1920). Beyond the pleasure principle. In P. Gay (Ed.), The Freud reader (pp. 594-626). New York, NY: W.W. Norton & Company, Inc.

Freud, S. (1923). The ego and the id. In P. Gay (Ed.), The Freud reader (pp. 628-661). New York, NY: W.W. Norton & Company, Inc.

Freud, S. (1924). Three essays on the theory of sexuality. In P. Gay (Ed.), The Freud reader (pp. 239-293). New York, NY: W.W. Norton & Company, Inc.

Fonagy, P. (2001). Attachment theory and Psychoanalysis. New York, NY: Other Press.

Fonagy, P. (1999). Psychoanalytic theory from the viewpoint of attachment theory and Research. In J. Cassidy & P. Shaver (Eds.), Handbook of attachment: Theory, research, and clinical applications (pp. 595-624). New York, NY: Guilford Press.

Fonagy, P., Leigh, T., Steele, M., Steele, H., Kennedy, R., & Mattoon, G. (1996). The relation of attachment status, psychiatric classification, and response to psychotherapy. Journal of Consulting and Clinical Psychology, 64 (1), 22-31.

George, C. & Solomon, J. (1996). Representational models of relationships: Links between caregiving and attachment. Infant Mental Health Journal, 17 (3), 198-216.

George, C. & West, M. (2001). The development and preliminary validation of a new

measure of adult attachment: The Adult Attachment Projective. Attachment & Human Development, 3 (1), 30-61.

George, C., West, M., & Pettem, O. (1999). The Adult Attachment Projective. Unpublished attachment measure and coding manual. Mills College, Oakland, CA.

Gilliom, M., Shaw, D., Beck, J., Schonberg, M., & Lukon, J. (2002). Anger regulation In disadvantaged preschool boys strategies, antecedents, and the development of Self-control. Developmental Psychology, 38 (2), 222-235.

Hibbard, S., Hilsenroth, M, Hibbard, J, & Nash, M. (1995). A validity study of two projective object representations measures. Psychological Assessment, 7 (4), 432-439.

Klein, M. (1952). Some Theoretical Conclusions Regarding the Emotional Life of the Infant. Envy and Gratitude (pp. 61-75). London: Hogarth Press.

Kohut, H. (1977). Does psychoanalysis need a psychology of the self? In The Restoration of The Self (pp. 63-139). New York: International Universities Press, Inc.

Koren, K., Oppenheim, D., Dolev, S., Sher, E., Etzion-Carasso, A. (2002). Mother's insightfulness regarding their infants' internal experiences: Relations With maternal sensitivity and infant attachment. Developmental Psychology, 38 (4), 534-542.

Levy, K., Blatt, S. & Shaver, P. (1988). Attachment styles and parental representations. Journal of Personality and Social Psychology, 74 (2), 407-419.

Laible, D. & Thompson, R. (1998). Attachment and emotional understanding of Preschool children. Developmental Psychology, 34 (5), 1038-1045.

Lyons-Ruth, K. (1996). Attachment relationships among children with aggressive behavior problems: The role of disorganized early attachment patterns. Journal of Consulting and Clinical Psychology, 64 (1), 64-73.

Moss, E. & St.-Laurent, D. (2001). Attachment at school age and academic Performance. Developmental Psychology, 37 (6), 863-874.

Muir, R. (1995). Transpersonal processes: A bridge between object relations and attachment theory in normal and psychopathological development. British Journal of Medical Psychology, 68, 243-257.

Murry, H. (1943). Manual for the Thematic Apperception Test. Cambridge, MA: Harvard University Press.

Pasoda, G., Jacobs, A., Richmond, M., Carbowell, O., Alzate, G., Bustamante, M., & Quicino, J. (2002). Maternal caregiving and infant security in two cultures. Developmental Psychology, 38 (1), 67-78.

Pianta, R., Egeland, B., & Adam, E. (1996). Adult attachment classification and self-reported psychiatric symptomatology as assessed by the Minnesota Mulitphasic Personality Inventory-2. Journal of Consulting and Clinical Psychology, 64 (2), 273-281.

Rothbard, J. & Shaver, P. (1994). In Attachment in Adults: Clinical and Developmental Issues (pp. 31-71). New York, NY: Guilford Press.

Sable, P. (1992). Attachment theory: application to clinical practice with adults.

Clinical Social Work Journal, 32 (5), 271-283.

Slade, A., Belsky, J., Aber, J., & Phelps, J. (1999). Mothers' representations of their Relationships with their toddlers links to adult attachment and observed mothering. Developmental Psychology, 35 (3), 611-619.

Stams, G, Juffer, F., & van Ijzendoorn, M. (2002). Maternal Sensitivity, infant Attachment, and temperament in early childhood predict adjustment in middle Childhood. The case of adopted children and their biologically unrelated parents. Developmental Psychology, 38 (5), 806-821.

Stuart, J., Westen, D., Lohr, N., Benjamin, J., Becker, S., Vorus, N., & Silk, K. (1990). Object relations in borderlines, depressives, and normals: An examination of human responses on the Rorschach. Journal of Personality Assessment, 55 (1&2), 296-318.

Silverman, D. (1991). Attachment patterns and Freudian theory: An integrative Proposal. Psychoanalytic Psychology, 8 (2), 169-193.

Tramantano, G., Javier, R., & Colon, M. (2003). Discriminating among subgroups of borderline personality disorder: An assessment of object representations. The American Journal of Psychoanalysis, 63 (2), 149-175.

Waters, E., Merrick, S., Treboux, D., Crowell, J. & Albersheim, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. Child Development, 71 (3), 684-689.

West, M. & George, C. (2002, in press) Attachment and dysthymia: The contributions

of preoccupied attachment and agency of self to depression in women. Attachment and Human Development.

Westen, D. (1991). Clinical assessment of object relations using the TAT. Journal of Personality Assessment, 56 (1), 56-74.

Westen, D. (1995). Social Cognition and Object Relations Scale: Q-Sort for Projective Stories. Cambridge Hospital and Harvard Medical School: Cambridge, MA.

Westen, D., Lohr, N., Silk, K., Gold, L., & Kerber, K. (1990). Object relations and social cognition in borderlines, depressives, and normals: A Thematic Apperception test analysis. Psychological Assessment, 2 (4), 355-364.

Winnicott, D. (1931). A note on normality and anxiety. In Through paediatrics to psychoanalysis collected papers (pp. 3-22). London: Karnac Books.

Winnicott, D. (1935). The manic defence. In Through paediatrics to psychoanalysis collected papers (pp. 129-145). London: Karnac Books.

Winnicott, D. (1941). The observation of infants in a set situation. In Through paediatrics to psychoanalysis collected papers (pp. 52-70). London: Karnac Books.

Winnicott, D. (1948). Reparation in respect of mother's organized defence against depression. In Through Paediatrics to psychoanalysis collected papers (pp. 91-97). London: Karnac Books.

Winnicott, D. (1952). Psychoses and child care. In Through paediatrics to psychoanalysis collected papers (pp. 219-229). London: Karnac Books.

Winnicott, D. (1960). The theory of the parent-infant relationship. In The

maturational processes and the facilitating environment studies in the theory of emotional development (pp. 37-56). Madison, CN: International Universities Press, Inc.

Winnicott, D. (1960). Ego distortion in terms of true and false self. In The maturational processes and the facilitating environment studies in the theory of emotional development (pp. 140-153). Madison, CN: International Universities Press, Inc.

Winnicott, D. (1962). A personal view of the Kleinian contribution. In The Maturational processes and the facilitating environment studies in the theory Of emotional development (pp. 171-179).

Winnicott, D. (1971). Playing and reality. New York, NY: Routledge.

Appendix A

Table 1 Kappa and Intra-class Correlation Coefficients

For the Interrater Reliability of the AAP and SCORS

Measures	Reliability Rate	p-value
Adult Attachment Projective Multi-rater Kappa, 5 raters	.87	.0000
Thematic Apperception Test Intra-class Correlation Coefficients, 4 raters		
Complexity of Representations of People	.87	.0000
Affect Quality of Representations	.94	.0000
Emotional Investment In Relationships	.96	.0000
Emotional Investment in Values and Moral Standards	.81	.0000
Understanding of Social Causality	.84	.0000
Experience and Management of Aggressive Impulses	.92	.0000
Self-Esteem	.75	.0000
Identity and Coherence of Self	.71	.0002

Table 2 Levene's Test of Equality of Error Variances

	F	df	Significance
Complexity of Representation of People	.014	1	.907
Affective Quality of Representations	.398	1	.529
Emotional Investment in Relationships	.313	1	.577
Emotional Investment in Values and Moral Standards	.037	1	.847
Understanding of Social Causality	.360	1	.550
Experience and Management of Aggressive Impulses	3.730	1	.056
Self-Esteem	1.920	1	.169
Identity and Coherence of Self	3.023	1	.085

Table 3 Sample Demographic Data

	Frequency	Percent	Cumulative Percent
Gender			
Male	28	28.9	28.9
Female	69	71.1	100.0
Total	97	100.0	
Ethnic Background			
Caucasian	87	89.7	89.7
African American	7	7.2	96.9
Asian	3	3.1	100.0
Total	97	100.0	
Year in College			
Freshman	32	33.0	33.0
Sophomore	11	11.3	44.3
Junior	25	25.8	70.1
Senior or Above	29	29.9	100.0
Total	97	100.0	
Raised by Parents			
Yes	91	93.8	93.8
No	6	6.2	100.0.
Total	97	100.0	
Loss of Parent Due to Death or Separation			
Yes	4	4.1	4.1
No	93	95.9	100.0
Total	97	100.0	
Experience of Parental Divorce			
Yes	27	27.8	27.8
No	70	72.2	100.0
Total	97	100.0	
Loss of Another Relative Due to Death			
Yes	46	47.4	47.4
No	51	52.6	100.0
Total	97	100.0	
Experience of Major Personal Illness or Injury			
Yes	7	7.2	7.2
No	90	92.8	100.0
Total	97	100.0	

Table 4 Pearson's R Correlations of Demographic Data and SCORS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.007	-.224*	.298**	.290**.	-.037	.109	.164	.177	.123	.150	.138	.083	.159	.110
	.	.945	.027	.003	.004	.721	.289	.109	.083	.232	.141	.177	.419	.119	.284
2	---	1.00	.120	-.097	-.061	.002	.195	.074	-.013	.160	-.056	.074	-.108	-.158	-.037
		.	.243	.346	.551	.986	.056	.468	.896	.118	.585	.469	.294	.122	.721
3	---	---	1.00	-.592**	-.222*	-.094	-.013	-.069	-.117	-.011	-.150	-.022	-.153	-.172	-.137
			.	.000	.029	.361	.897	.502	.252	.916	.143	.828	.136	.092	.180
4	---	---	---	1.00	.103	-.058	.218*	.023	-.055	-.062	.131	-.008	-.020	.116	.105
				.	.317	.574	.032	.821	.591	.545	.202	.940	.847	.257	.307
5	---	---	---	---	1.00	.005	-.037	.087	-.019	-.100	-.026	.060	.008	-.002	-.041
					.	.964	.719	.398	.852	.332	.803	.561	.935	.987	.693
6	---	---	---	---	---	1.00	-.105	.018	.102	.055	.103	.064	.091	.039	-.015
						.	.305	.861	.320	.590	.315	.535	.378	.707	.883
7	---	---	---	---	---	---	1.00	.021	-.083	-.101	.094	-.076	-.176	.022	.095
							.	.837	.417	.325	.361	.459	.084	.832	.354

Note. *p<.05, **p<.01 N=97 for each cell. 1 = Age, 2 = Gender, 3 = Raised by Parents, 4 = Loss of Parent, 5 = Parental Divorce, 6 = Personal Injury or Illness, 7 = Death of Someone Close, 8 = Complexity of Representation of People, 9 = Affective Quality of Representations, 10 = Emotional Investment in Relationships, 11 = Emotional Investment in Values and Moral Standards, 12 = Understanding of Social Causality, 13 = Experience and Management of Aggressive Impulses, 14 = Self-Esteem, 15 = Identity and Coherence of Self.

Table 5 AAP & Other Death Cross Tabulations and Chi-Square Test

Adult Attachment		Other Loss-Yes	Other Loss-No	Total	Pearson Chi Square Value	df	Asymp. Sig. (2-sided)
Secure	Count	23	21	44	.760	1	.383
	% Within AAP	52.3	47.7	100.0			
	% Within Other Death	50.0	41.2	45.4			
	% of Total	23.7	21.6	45.4			
Insecure	Count	23	30	53			
	% Within AAP	43.4	56.6	100.0			
	% Within Other Death	50.0	58.8	54.6			
	% of Total	23.7	30.9	54.6			
Total	Count	46	51	97			
	% Within AAP	47.4	52.6	100.0			
	% Within Other Death	100.0	100.0	100.0			
	% of Total	47.4	52.6	100.0			

Table 6 AAP & College Year Cross Tabulations and Chi-Square Test

Adult Attachment		Freshman	Sophomore	Junior	Senior or Above	Total	Pearson Chi Square Value	df	Asymp. Sig. (2-sided)
Secure	Count	13	6	13	12	44	1.294	3	.731
	% Within AAP	29.5	13.6	29.5	27.3	100.0			
	% Within Other Death	40.6	54.5	52.0	41.4	45.4			
	% of Total	13.4	6.2	13.4	12.4	45.4			
Insecure	Count	19	5	12	17	53			
	% Within AAP	35.8	9.4	22.6	32.1	100.0			
	% Within Other Death	59.4	45.5	48.0	58.6	54.6			
	% of Total	19.6	5.2	12.4	17.5	54.6			
Total	Count	32	11	25	29	97			
	% Within AAP	33.0	11.3	25.8	29.9	100.0			
	% Within Other Death	100.0	100.0	100.0	100.0	100.0			
	% of Total	33.0	11.3	25.8	29.9	100.0			

Table 7 AAP & Parental Divorce Cross Tabulations and Chi-Square Test

Adult Attachment		Parental Divorce-Yes	Parental Divorce-No	Total	Pearson Chi Square Value	df	Asymp. Sig. (2-sided)
Secure	Count	10	37	44	1.046	1	.306
	% Within AAP	22.7	77.3	100.0			
	% Within Divorce	37.0	48.6	45.4			
	% of Total	10.3	35.1	45.4			
Insecure	Count	17	36	53			
	% Within AAP	32.1	67.9	100.0			
	% Within Divorce	63.0	51.4	54.6			
	% of Total	17.5	37.1	54.6			
Total	Count	27	70	97			
	% Within AAP	27.8	72.2	100.0			
	% Within Divorce	100.0	100.0	100.0			
	% of Total	27.8	72.2	100.0			

Table 8 Descriptive Statistics and Estimates of AAP and SCORS

Dependent Variable	Adult Attachment	M	STD	N	95% Confidence Interval Lower	Upper
Complexity of Representation of People	Secure	4.291	.704	44	4.073	4.508
	Insecure	3.879	.745	53	3.681	4.077
	Total	4.066	.752	97		
Affective Quality of Representations	Secure	4.000	.578	44	3.829	4.171
	Insecure	3.479	.565	53	3.324	3.635
	Total	3.716	.625	97		
Emotional Investment in Relationships	Secure	3.805	.717	44	3.593	4.016
	Insecure	3.374	.696	53	3.181	3.566
	Total	3.569	.735	97		
Emotional Investment in Values and Moral Standards	Secure	3.986	.399	44	3.880	4.093
	Insecure	3.875	.314	53	3.779	3.972
	Total	3.926	.357	97		
Understanding of Social Causality	Secure	4.200	.820	44	3.968	4.432
	Insecure	3.706	.739	53	3.494	3.917
	Total	3.930	.812	97		
Experience and Management of Aggressive Impulses	Secure	3.964	.396	44	3.833	4.094
	Insecure	3.653	.468	53	3.534	3.772
	Total	3.794	.461	97		
Self-Esteem	Secure	4.141	.480	44	4.009	4.273
	Insecure	3.872	.408	53	3.751	3.992
	Total	3.994	.460	97		
Identity and Coherence of Self	Secure	4.882	.432	44	4.719	5.044
	Insecure	4.476	.621	53	4.327	4.624
	Total	4.660	.578	97		

Table 9 Comparisons of Secure and Insecure Findings of the AAP and SCORS

Dependent Variable	Mean Difference Secure-Insecure	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Complexity of Representations of People	.412*	.007	.118	.706
Affective Quality of Representations	.521*	.000	.290	.752
Emotional Investment in Relationships	.431*	.004	.145	.717
Emotional Investment in Values and Moral Standards	.111	.129	.033	.255
Understanding of Social Causality	.494*	.002	.180	.809
Experience and Management of Aggressive Impulses	.311*	.001	.134	.488
Self-Esteem	.269*	.004		.448
Identity and Coherence of Self	.406*	.000	.186	.626

Note. *p<.01

Vita

Betty Marie Martin was born in Okinawa, Japan on April 8th, 1973. At the age of two, she moved to the United States with her father. Betty grew up in Lebanon, Pennsylvania and always had an affinity for working with people. While still attending Cedar Crest High School, she became employed as a certified nurse assistant to elderly individuals in a hospice. She graduated in 1991 and completed a dual major of psychology and philosophy at Millersville University in Millersville, Pennsylvania. In college, she was employed as the Adoption Project Research Coordinator, volunteered at an outpatient, partial hospitalization program for individuals with severe mental illness, and became a residential rehabilitation specialist for adults with persistent and chronic mental illness in a group home. She graduated cum laude from Millersville in 1995.

Betty later pursued her doctoral degree in Clinical Psychology at the University of Tennessee, Knoxville. She completed research in the areas of projective testing, attachment theory, and object relations. As part of her training, she worked as a therapist to low-income populations through the university clinic and a local community mental health center. Betty was also a graduate teaching instructor and taught eight semesters of psychology courses including honors introductory psychology, general introductory psychology, abnormal psychology, and child psychology. She was awarded a Mark of Distinction for Honors Quality in Graduate Clinical Practice and the University of Tennessee Clinical Psychology Alumni Award for Excellence in Scholarship. She successfully defended her dissertation in June of 2004 and will be completing her internship at the State University of New York in Stony Brook, New York.